ISSUE BRIEF

Pilot of Social and Sustainability Bonds on China’s Inter-Bank Market
Mobilizing the bond market for the SDGs
Abstract

Since 2016, the green bond market has boomed in China and globally, providing valuable experience that can be extended to wider sustainability issues - going beyond green, to include protecting and empowering vulnerable groups, so no one falls behind.

COVID-19 further accelerated the global market for social and sustainability bonds, witnessing strong growth in recent years. In the post-pandemic era, this trend is likely to continue, amidst growing consensus over the urgency of delivering the 2030 Agenda, to end poverty and prevent the worst effects of climate change by 2030.

In China, the social and sustainability bonds market was in a nascent stage until November 2021, when social and sustainability bonds were introduced to the China Interbank Bond Market for the first time, through a panda bond pilot program launched by the National Association of Financial Institutional Investors (NAFMII).

The United Nations Development Programme (UNDP) provided technical support and advice for the program. The pilot was based on Chinese market practices and incorporated the UN Sustainable Development Goals (SDGs), as well as commonly agreed international principles for sustainable bond markets, including those concerning the use of proceeds, project evaluation and selection, management of proceeds, as well as reporting.

To share the experiences with issuers, investors, as well as regulators in China and globally, NAFMII and UNDP co-drafted this issue brief, with the aim of inspiring further market practice and policy innovation for increased SDG contributions on the bond market. We recommend that policy makers, bond issuers, as well as investors all play their role in this field, and work together to incentivize and regulate the market, boost transparency, as well as increase capacity in impact measurement and reporting.

---

1 Based on the definition from International Capital Market Association, hereinafter 1) green bonds refer to bonds where the use of proceeds is earmarked exclusively to finance or re-finance new and/or existing eligible green projects, 2) social bonds refer to bonds where the use of proceeds is earmarked exclusively to finance or re-finance new and/or existing projects with positive social outcomes, 3) sustainability bonds refer to bonds where the proceeds is earmarked exclusively to finance or re-finance a combination of both green and social projects.
Background

The Sustainable Development Goals are global targets adopted in 2015 by 193 United Nations (UN) member states, designed to eradicate poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The 17 Goals aim to bring about comprehensive reform and transition across the three dimensions of sustainable development—economic, social and environmental—guiding humanity towards a future that can include everyone and sustain life on earth.

Over the past two years, billions have suffered from the effects of COVID-19, conflicts, food and energy shortages and extreme weather events. Interconnected development challenges are having catastrophic environmental, social and economic effects on people and their livelihoods, which could lead to an additional 75 million to 95 million people falling into extreme poverty in 2022. Human development indicators fell in 2020 and 2021 in over 90 percent of countries, reversing five years of gains.

These interconnected crises demand integrated solutions, requiring a whole-of-society transformation. Financial markets have a critical role to play. Capital must be urgently redirected from investments that harm the planet and society under a ‘business-as-usual’ approach, to investments in a green, just and inclusive future for all. This would create an impact-oriented financial system, with policy incentives and innovative financial instruments that align with the 2030 Agenda and SDGs. It is also in the interests of all investors to support a sustainable financial system: failure to act now on climate change could cut global economic output by 18 percent by 2050, according to Swiss Re, with Asian economies hit hardest.

The SDGs provide a roadmap for efficient capital allocation, generating not only impact, but also long-term business returns safeguarding against market volatilities. Investing in the SDGs means investing in growth and opportunity. SDG-aligned sectors offer business opportunities worth US$12 trillion, mainly in Asia and an estimated US$2.3 trillion in China alone. Institutions that invest in such areas today will also be more able to adapt to an uncertain future, while preserving critical resources their businesses depend on.

The global bond market is an important part of capital markets and a key source of finance. However, only 11.3 percent of the bonds issued was reportedly used in environmentally or socially focused areas. While this already represents a 6.7 percent jump from 2020, much more is needed to unlock the potential of bond markets in supporting the SDGs.
Since 2016, **green bonds** have taken the lead in developing sustainable bond markets both in China and internationally. These provide innovative financial solutions for tackling issues such as climate change, pollution and biodiversity loss. The experience of using bond instruments to address environmental issues should be replicated across wider sustainability areas, like protecting and empowering vulnerable groups such as those living below the poverty line, those lacking education or basic services, along with women.

**Innovative financial instruments** should be developed to target human development challenges, promote gender equality and encourage inclusive growth, while promoting prosperity for all. This issue brief will focus on opportunities and challenges in scaling such instruments to a broader range of SDGs and share valuable lessons gained from regulatory and market innovation in China.

**02 Development and trends of social and sustainability bonds globally**

**2.1 Fast growth despite economic downturn**

Green bonds have dominated the sustainable bond market since the beginning of trackable issuance records (approximately around 2015). **Social and sustainability bonds** represented less than 25 percent of the market in 2015. However, they have demonstrated fast growth, especially after 2020. By 2021, the two kinds of bonds accounted for more than 40 percent of the market, with social bonds at 23.6 percent and sustainability bonds at 21.2 percent.

---


8 For easier comparisons with historical data, the sustainable bond market here only covers the range of green, social, and sustainability bonds (GSS bonds) - the majority in volume terms. Other instruments with current limited scale, including sustainability-linked bonds, blue bonds, gender bonds, etc., are not in the range of our data analysis.

The change of landscape is partly due to stakeholder’s increased attention to social issues, and the overlap between social and environmental issues. This became clearer after 2020, when the pandemic revealed the fragility of social systems and how our broken relationship with nature carries grave risks for us all.\textsuperscript{10}

Despite the global economic downturn brought by COVID-19, conflict, energy and food shortages, social and sustainability bond volumes enjoyed significant growth. In 2021, the market surged to a historic high, with US$ 378 billion\textsuperscript{11} of combined issuance globally of the two instruments —more than 30-times the 2016 figure\textsuperscript{12}.

The resilience shown by social and sustainability bonds amidst the market turmoil of the last 2-3 years is likely to continue, given the growing urgency of governments to deliver on their commitments to the 2030 Agenda, as well as rising ESG awareness among stakeholders.

### 2.2 Market players: the public sector dominates, but private issuers are catching up

The public sector plays a dominant role in the social and sustainability bond issuance.

Among social bonds, government-backed institutions were the biggest issuers in both 2020 and 2021. In October 2020, the European Union (EU) launched its € 100 billion SURE\textsuperscript{13} social bond program\textsuperscript{14}, designed to support employment during the pandemic. SURE made the EU the world’s

![Figure 1. 2016–2021 growth of green, social and sustainability bonds](image-url)

Source: Compiled by author based on the Climate Bond Initiative Interactive Data Platform\textsuperscript{15}

---

\textsuperscript{10} 2022-11. Climate Bonds Initiative Interactive Data Platform. https://www.climatebonds.net/market/data/
\textsuperscript{11} Source: 2022-01. Moody. https://assets.website-files.com/5df9172583d7ec04960799a/61f42b2b751d8f7f680e9e1_BX11044_MESG%20Sustainable%20Finance%20Outlook%20Report%202022.pdf
\textsuperscript{12} AS shown in figure 1 the smaller of the growth multiplier of social bonds and sustainability bonds in 2021 compared to 2016 is taken as a conservative estimate. Source 2022-01. Moody. https://assets.website-files.com/5df9172583d7ec04960799a/61f42b2b751d8f7f680e9e1_BX11044_MESG%20Sustainable%20Finance%20Outlook%20Report%202022.pdf
\textsuperscript{13} Short for: The temporary Support to mitigate Unemployment Risks in an Emergency.
\textsuperscript{14} European Commission official website: https://ec.europa.eu/info/strategy/eu-budget/eu-borrower-investor-relations/sure-social-bonds_en
biggest issuer of social bonds, with the first SURE transaction attracting an order book of €233 billion, the largest in the history of global bond markets. With the latest disbursement (29 March 2022), the EU has provided €91.8 billion in back-to-back funding, benefiting 19 member countries.15

Sovereign social bonds have also been issued in developing countries. In 2021, Chile issued social bonds worth almost US$1 billion to support low-income families, the elderly and other vulnerable groups.16 In November 2021, Peru issued almost €1 billion in 15-year bonds17 to fund education, housing and essential health services.18

Across sustainability bonds, development banks are the major issuers, accounting for 68 percent of such instruments in 2020.19 In 2021, the World Bank issued US$41.6 billion in sustainability bonds,20 with a further US$7.2 billion in the first half of 2022,21 while in April 2022, the African Development Bank issued AUD 155 million (approximately US$113 million) of 10.5-year Kangaroo Social Bonds.

The private sector, following the lead of those governments, along with development finance institutions, has gradually joined the ranks of social and sustainability bond issuers.22 In the sustainability bond market, for example, non-financial corporate issuance rose 147 percent year-on-year in 2021, to US$43 billion or 24 percent of the sustainability bond market, while financial institution issuance of sustainability bonds rose 121 percent to US$30 billion, a market share of 17 percent.23

16 2022-04. CBI. https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf
17 2021-11. Archyde. Peru places social bonds for 1,000 million euros, in its second debt issue in two weeks - Archyde
18 2022-04. CBI. https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf
20 2022-04. CBI. https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf
21 2022-08. CBI. https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf
23 2022-04. CBI. https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf
Concepts”—innovation, coordination, green development, opening up, and sharing, to achieve China’s two centenary goals24. These concepts share some common objectives with the 2030 Agenda. China’s goals for “high-quality development” and “common prosperity” also align with core principles of the SDGs.

3.2 Policy infrastructure for market growth and product innovation

To enhance the role of finance in support of these national priorities, China has used a “top-down” policy-driven approach to boost its sustainable financial market. Among the first key steps were:

♦ In December 2015, the People Bank of China (PBoC) released a landmark document - People’s Bank of China Announcement 39, 2015 - providing guidance for issuing green bonds on interbank markets.

♦ In 2016, the launch of the over-arching architecture defined in the Guidelines for Establishing The Green Financial Systems was issued by the PBoC along with six other ministries and government agencies, followed by a series of policy incentives and regulations targeting the bond market.

These regulatory innovations marked the start of rapid growth in China’s sustainable finance market.

In the years that followed, regulators have published or updated normative documents such as the Green Bonds Endorsed Project Catalogue and Guidelines for the Conduct of Assessment and Certification of Green Bonds. The PBoC’s Plan for the Green Finance Evaluation of Banking Financial Institutions provided incentives and restraints for banks and financial institutions to increase their participation in the sustainable finance market and encourage trade in green bonds.

On reporting, the PBoC published its Guidelines on Environmental Information Disclosure by Financial Institutions, listing the information to be reported, along with the frequency and form of disclosure. Such disclosures prompt institutions to identify and monitor environmental and climate externalities of their investment and financing activities, and to some degree help shift funds from high-carbon sectors to sustainable alternatives. Since 2016, China’s green bond market has boomed from barely any issuance, to accumulatively US$ 183 billion (RMB 1.3 trillion)25 in outstanding volume by 2021.

The policy framework for green bonds established the infrastructure for social and sustainability bonds.

3.3 The pilot program on social and sustainability bonds

In order to expand the scope of sustainable bonds and reduce difficulty for issuers seeking to build project pipelines serving multiple impact targets, NAFMII in 2021 launched the Pilot Programme on Social Bonds and Sustainability Bonds. This was originally targeted at overseas issuers in China’s inter-bank market. Bonds under this pilot apply to a wide range of projects, covering environment protection, pandemic prevention, elderly and child care, facilities for people with disabilities, rural revitalisation, as well as fair access to healthcare and education, among other initiatives.

---

24 The first centenary goal is to build a moderately prosperous society by 2020; the second centenary goals is to build a modernized socialist country by 2049. These goals were presented by President Xi in 2012. 2017-10. CGTN. https://news.cgtn.com/

25 Converted with the UN operational rate in Nov 2022: US $1 to CNY 7.1.
The design of the pilot took into consideration both domestic practices and international standards. On a conceptual level, the pilot aims to reflect the convergence between the UN’s 17 SDGs and the 14th Five Year Plan. On the technical level, it builds on NAFMII’s existing procedures for bond registration and issuance, while taking reference from the four core elements of the International Capital Market Association (ICMA) Green Sustainability Social (GSS) bond principles (use of proceeds, project evaluation and selection, management of proceeds and reporting), external evaluation and certification mechanisms, as well as a framework issuance mechanism. Under UNDP’s technical assistance, the pilot took core elements from the SDG Finance Taxonomy (China) and adopted key principles, including Do No Significant Harm (DNSH), “serving vulnerable groups”, as well as considerations of using SDG targets as impact indicators.

Box 1. Definition of social and sustainability bonds under the NAFMII pilot

As per the definition followed under the NAFMII pilot, social bonds refer to bonds issued by an issuer on China’s inter-bank market, where the proceeds will be exclusively used for social projects, benefiting vulnerable groups, including middle and low-income groups, the unemployed, people affected by disasters, people living with disabilities, women, children, senior citizens, people living in remote areas, the under-educated, and others. In special circumstances, the target group could be the general public.

Sustainability bonds refer to bonds issued by an issuer in China’s inter-bank market, where the proceeds are exclusively applied to a combination of green and social projects which shall comply with relevant rules and regulations applicable to green bonds and social bonds, respectively. Proceeds of sustainability bonds can also be used for projects conferring both environmental and social benefits. Projects under the pilot programme should follow the principle of business sustainability and be able to attain market returns.
Box 2. SDG Finance Taxonomy (China)

Building on UNDP’s global SDG Impact Standards flag Ma intiative, UNDP China developed the SDG Finance Taxonomy (China), to complement China’s Green Bond Endorsed Project Catalogue. The SDG Finance Taxonomy China expands the scope of criteria beyond green to focus on positive social impact and benefiting groups at risk of falling behind.

The Taxonomy adopted a three-level project classification system to fit Chinese market practices. At the same time, it integrated impact indicators and screening criteria aligned with mainstream international principles, such as the Social Bond Principles of the ICMA, Principles for Responsible Investment (PRI), the Global Reporting Initiative (GRI), the international Finance Corporation (IFC) operating principles for impact investment, the Global Impact Investing Network (GIIN) Characteristics of Impact Investors, etc.

The Taxonomy was developed as a public good to encourage voluntary adoption from the market, with the long-term goal of increased regulatory support for standardised reporting and national statistical systems.

The New Development Bank was the first market adopter of the SDG Finance Taxonomy through the issuance of a CNY 5 billion (USD 700 million) 3-year SDG bond on China’s interbank market in March 2021.

3.4 Case studies under the pilot program

Since the pilot was launched in November 2021, a private company and a multilateral development bank have issued sustainability bonds.

3.4.1 Issuance from a private company

In November 2021, a private company issued CNY 150 million (US$ 23 million) of sustainability bonds - the pilot program’s first issuance. A few issuer experiences worth sharing to inform and inspire other issuers and investors include:

1. Disclosure scope and granularity

- The issuer disclosed the eligibility criteria of social and green projects and processes to screen and assess eligible social and green project, and the procedures for evaluating and managing potential social and green risks. For example, checks were made to ensure all necessary compliance documents were present, and these were sent to company’ management and executives for review and validation.

- The issuer disclosed the social or green targets that project beneficiaries of the issuance intended to finance, supporting evidence for projects’ eligibility and the expected social or green benefits the projects would generate. Those benefits were quantified in terms of, for example, jobs created, additional provision of elderly care beds, or percentage of population covered by water treatment plants.

- The issuer scheduled reports on the use of proceeds and project progress for the previous year every 30 April during the duration of the bonds. Half-yearly reports on the use of proceeds in social and green projects were to be made by 31 August.

27 https://www.ndb.int/annual-report-2021/pdf/SmartPDF/
2. Use of proceeds ear-marked for China’s sustainable development needs and the SDGs

The proceeds from this issuance have been used to repay bank loans taken out to fund four financial leases projects in prefecture-level cities in Southeast China:

- One social project: The construction of an elderly care practical training centre at a vocational school. The center will provide services to meet growing demand of elderly care in communities, as well as opportunities for students to put their training into practice.
- One green project: Electric buses purchased by a local public transport corporation are helping to reduce carbon emissions.
- Two sustainability projects combining green and social for: (i) green and smart public transportation to reduce emissions and improve villagers’ access to convenient public transport in rural areas; (ii) building a new water treatment facility to handle both household and industrial wastewater, reducing the impact of pollution both on public health and the environment.

The bond use of proceeds intends to contribute towards SDG 3 (good health and well-being), SDG 4 (quality education), SDG 6 (clean water and sanitation), SDG 8 (decent work and economic growth), SDG 9 (industry, innovation and infrastructure), SDG 10 (reduced inequalities), SDG 11 (sustainable cities and communities) and SDG 12 (responsible consumption and production). Meanwhile, the projects also potentially support other SDGs, for example, by providing better and greener public transport and basic infrastructure in rural areas, at lower cost and over a wider area, while doing no significant harm to biodiversity.

3. External verification of pre-issuance

During the pre-issuance stage, the issuer contracted accredited third-party verifiers to assess and verify eligible projects the issuance intended to finance once the purpose of use of proceeds has been confirmed. The issuer has also committed that during the lifetime of the bonds, progress and social and environmental benefits of the projects will be tracked and assessed, with regular reporting.

3.4.2 Issuance from a multilateral development bank (MDB)

MDBs in general, have relatively mature experience in sustainable finance markets, so NAFMII welcomed the use of existing procedures for project selection, use of proceeds,
management of proceeds and information disclosure, provided the four core elements were present.

In May 2022, an MDB used its sustainable development bond framework to issue a CNY 1.5 billion (USD 213 million) sustainable development bond on China’s interbank market. The bank’s framework adopts international standards and principles, including the ICMA four core elements, and reference to the SDGs. Issuance under existing bond frameworks is a mainstream mechanism on the international bond market, yet not a common practice on the Chinese bond market. As such, the issuance was a valuable addition to China’s interbank market. Experience worth sharing includes:

1. Application of commonly agreed international standards and principles

According to organizational policy, before approving a project funding application, the organization should conduct a full analysis of projects financial and economic feasibility, along with borrowers’ debt sustainability. Projects funded by the organization will be monitored under the organization’s environmental and social framework (ESF), which includes environmental and social policies, standards and blacklists, reflecting common practices among MDBs.

The organization uses Common Principles for Climate Change Mitigation Finance Tracking and Common Principles for Climate Change Adaptation Finance Tracking to track funded climate projects, used by MDBs and the International Development Finance Club (IDFC). It also shares its climate financing data with the OECD’s Development Assistance Committee and the UNFCCC’s Standing Committee on Finance.

2. Indicator-setting for environmental and social impact

The organization has chosen a set of indicators to support monitoring, evaluation and reporting. Environmental indicators include greenhouse gas emissions, installed renewable generating capacity and area of land protected by flood defences. Social indicators include the number of households with improved electricity supply, the number of households with new or improved access to safe drinking water and/or sanitation, along with the number of people benefiting from disaster relief or climate adaptation projects. In addition, they have used the SDGs as targets for project impact. For example, SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 9 (industries, innovation and infrastructure) and SDG 11 (sustainable cities and communities) are prioritized for infrastructure projects in energy, transportation, digital technology, water services, etc.

---

28 Although it’s not called a sustainability bond, the bond meets the technical requirement of the NAFMII pilot on social bonds and sustainability bonds. Therefore, it’s counted as part of the Pilot.
Outlook

The pilot programme of NAFMII has set the stage for the development of social and sustainability bonds in China, while providing experiences for other countries to learn from, in order to promote similar endeavours.

With increasing awareness of broader SDG coverage beyond environmental protection, and the inter-linkages between different SDGs, reflected in recent policy discussions such as the "integration between green finance and inclusive finance", interest in social and sustainability bonds is likely to grow.

However, to further scale up the market, three key aspects must be considered.

4.1 Improve policy support for social and sustainability bonds and create interoperable sustainable finance standards at the global level

The number of standards, policies, laws and regulations, as well as self-regulatory codes covering social and sustainable bonds, has been increasing annually. In October 2018, the ASEAN Capital Markets Forum published the ASEAN Social Bond Standards and ASEAN Sustainability Bond Standards. In October 2021, Japan’s Financial Services Agency published its Social Bond Guidelines. And in February 2022, the EU issued its EU Social Taxonomy.

However, there are no established models or any consensus on global interoperable social and sustainability bond standards. There is a lack of a shared common language to connect investors and project owners in different jurisdictions. Harmonized standards and rigorous reporting requirements are essential to attract more market actors and investment and promote the issuance and purchase of social and sustainability bonds.

China has relatively sound standards and supporting policies for green bonds, which are gradually being aligned with international practices. However, standards for other aspects of sustainable development are needed. Drawing on experience accumulated during NAFMII’s pilot program, further steps should be taken to build robust standards for social and sustainability bonds, along with market incentives, policy regulations and disclosure requirements.

Furthermore, through the International Platform of Sustainable Finance (IPSF), China and the EU have already launched a comparative study of their environmentally sustainable investments and published a Common Ground taxonomy. These moves are crucial to improve interoperability of standards around the world.
and boost future growth in global green bond markets. We recommend the scope of that work is expanded to areas beyond climate action and green development, to build a shared common language in social and sustainability bonds, as well across different countries and jurisdictions.

4.2 Increase capacity building and technical assistance for issuers to improve impact management and reporting

Compared with green bonds where impact quantification is relatively more mature, impact measurement and disclosure for social and sustainability bonds remains challenging. Definitions of “social responsibility” across regions and industries often vary. In some cases, social benefits are qualitative and less measurable. These factors demotivate institutions to issue labelled social and sustainability bonds. However, these challenges are not insurmountable. Various international initiatives have already introduced useful methodologies and tools. In support of these existing methodologies, issuers can also refer to the 169 targets of the SDGs and guidance from the appropriate UN bodies, when defining impact indicators.

Integrating the SDGs into the decision-making at institutional strategy and management level would strengthen the overall monitoring and reporting architecture, sending clearer signals at operational level. This would include developing comprehensive sustainable development strategies and roadmaps for the entire organisation. Ensuring an organization’s management, governance and accountability approach all align with sustainability goals is likely to help incubate more sustainable finance projects, while attracting responsible investors from China and overseas.

Key stakeholders, such as regulatory bodies, international organisations, universities, think tanks, development finance institutions, should increase technical assistance to issuers and encourage them to participate in international exchanges, build capacities, as well as improve their impact measurement and reporting.

4.3 Leverage the role of institutional investors

Social and sustainability bond markets will not grow without active engagement from institutional investors. That said, investors still have limited awareness about the material financial risks linked with environmental and social impact. So, despite policy drivers, there is still a lack of “bottom-up” market drivers for social bonds and sustainability bonds to grow – including wider investor awareness to boost demand – in China and globally.

This could be tackled with increased advocacy to improve recognition and understanding of the SDGs and sustainability concepts among investors, who should be encouraged to use SDGs as internal pricing tools during their financial decision-making, with preference given to investments benefiting sustainable development with the potential for long-term increases in value. Investors should also take active stewardship and discuss sustainable development factors with issuers, as well as push issuers to report information relevant to sustainable development; strengthen risk management throughout the whole life cycle (ex-ante, proceeds managing, and ex-post) of the bond; and provide purchasers with information on their entity-level sustainability performance. Investors can also influence issuers and businesses by making their investment frameworks more socially responsible and sustainable, working together to increase the impact of sustainable investment and financing.35

Such steps would be vital, for only by ensuring adequate financing for the SDGs can we truly leave no one behind and safeguard life on earth by 2030. UNDP and NAFMII stands ready to continue supporting all parties in building a more sustainable, inclusive bond market, in order to realise this.
For further discussion on the topics related to the issue brief please contact:

Ms. WANG Yali
yali.wang@undp.org
UNDP China

Dr. XU Qing
qing.xu@undp.org
UNDP Bangkok Regional Hub

Ms. YANG Jianjian
yangjianjian@nafmii.org.cn
NAFMII

Mr. WU Yanbin
wuyanbin@nafmii.org.cn
NAFMII

Thanks to Ms. Ren Qing and Ms. Violante di CANOSSA for the research guidance, Ms. YAN Rui for the research assistance, Mr. Roddy FLAGG for the Chinese - English translation, and Ms. Grace BROWN for the English editing.