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Innovative Finance—the Key to a Sustainable Future in Thailand

Introduction

Sustainable finance in Thailand is coming of age—driven by government initiatives, increased investment in renewable energy and public transport infrastructure, pressure from regulators and investors at home and abroad, and the adoption of environment, social, and governance (ESG) principles by businesses including the banking and financial sector.

In the latest announcement of the Dow Jones Sustainability Indices (DJSI) in 2021, 24 Thai listed companies were selected as members of the DJSI—the highest inclusion among ASEAN economies for an eighth consecutive year.

Sustainability-linked loans (SLL) from companies listed on the stock exchange have been rising and the country has pioneered new forms of sustainable financing, becoming the first Southeast Asian nation to issue a sovereign sustainability bond.

Even the COVID-19 epidemic failed to slow the trend. ESG bond issuance in Thailand is expected to reach THB100 billion (USD3 billion) in 2021, up more than 10%

from last year's THB86.4 billion, according to the Thai Bond Market Association.¹ This was a mix of sustainability bonds (THB50 billion), green bonds (THB29.6 billion) and social bonds (THB6.8 billion).

Sustainable finance is also starting to take off across Southeast Asia. Governance, Social and Sustainability (GSS) financing reached a record high of USD2.1 billion in 2020, up 5.2% from the previous year, according to the Climate Bonds Initiative's (CBI) *ASEAN Sustainable Finance State of the Market 2020* report.² Singapore continued to lead the region, accounting for 53% of issuance, followed by Indonesia (24%) and the Philippines (9%). Thailand issued 8% of the total. The development of these new kinds of financing instruments is attracting huge interest from investors, companies, and financiers. Given that the market is still in the pioneering stage, Thailand's strong financial sector and its commitment to sustainability of the business sector means Thailand has an opportunity to take a lead in sustainable finance. This in turn will play a critical role in building a sustainable future for all. But regulators, banks, and businesses need to work together to develop the best policy environment and innovative financial instruments that meet social as well as environmental needs and to maintain the trust of investors with good governance and transparency.

Types of Sustainable Finance

Sustainable finance is a diverse and fast evolving area. There are currently a range of instruments available, including the following:

- **Green Bonds:** Used to finance projects with clear environmental benefits
- **Social Bonds:** Used to finance projects that address social issues and / or seek to achieve positive social outcomes, especially for a target population (e.g., the poor, vulnerable, unemployed, uneducated, etc.)
- **Sustainability Bonds:** Used to finance a mix of green and social projects
- **Transition Bonds:** Used to finance the transition away from carbon-intensive activities towards greener alternatives
- **Sustainability-Linked Bonds:** Used for general corporate finance, but with set Sustainability Performance Tar-

gets (SPTs) that are in line with a company's overall sustainability goals

- SLL: Loans with linkage to the SPTs as in the case of sustainability-linked bonds.

Putting Sustainable Development on the National Agenda

Sustainable finance cannot be developed in isolation. Fortunately, promoting sustainability is not new in Thailand. The late King Bhumibol Adulyadej pioneered the Sufficiency Economy Philosophy and implemented its principles through a diverse range of projects from the 1970s up until his death in 2016.³

This helped provide both ideological inspiration and a practical framework for Thailand's sustainable development. Many Thai companies have supported related projects or initiated their own. With sustainability as one of the pillars of the 20-Year National Strategy Plan (2018-37), the government created a range of sustainable policies focused on creating a brighter future for all.

In 2021 the government launched the Bio-Circular-Green (BCG) economy as a new model for inclusive and sustainable growth. It will focus on leveraging the country's biological and cultural diversity and developing technology and innovation to help Thailand move out of the middle-income trap and become a value-based and innovation-driven economy which is more robust and resilient to future shocks and disruption. The BCG conforms with UN Sustainable Development Goals (SDGs) and aligns with the Sufficiency Economy. It will initially focus on four industries: agriculture and food; medical and wellness; bio-energy, biomaterial and biochemical; and tourism and creative economy.⁴

These industries currently contribute a combined THB3.4 trillion to the economy, about one-fifth of gross domestic product (GDP). The BCG plans to increase this to THB4.4 trillion, or 24% of GDP, within 2026. Additional policies and legal and financial frameworks will be developed to support the strategy.

The government also approved the National Energy Plan 2022 which will re-

quire the energy sector to reduce carbon emissions and increase the contribution of clean and renewable energy to new power generation at a minimum of 50%.⁵ Prime Minister Prayut Chan-ocha announced Thailand's goals at the 2021 United Nations Climate Change Conference (COP26), saying that Thailand would accelerate its plan to achieve carbon neutrality within 2050 and net-zero emissions by 2065 if it receives "adequate and equitable support for technology, finance, capacity building, as well as cooperation under the convention".

New laws are being developed to support the transition to a more sustainable economy, focusing on areas such as carbon pricing, including the Climate Change Act, Greenhouse Gas Reporting Law, and Emission Trading System Law. Furthermore, a framework has been approved to enable the investment in, and development of, clean energy for electricity generation for use in the Eastern Economic Corridor (EEC), a special economic zone made up of three provinces in eastern Thailand.⁶

The EEC itself is being developed as a smart manufacturing and logistics hub for ASEAN as well as a key driver of the country's transition to industry 4.0 under the Thailand 4.0 policy, which is also focusing on the development of 12 S-curve industries. These are: automobiles, smart electronics, medical and wellness tourism, agriculture and biotechnology, food, robotics, logistics and aviation, biofuels and biochemicals, digital, medical services, defence, and education development.⁷ The Board of Investment is offering a range of privileges to attract investment into the EEC.

The EEC will support the broader BCG policy and has also set a net-zero target for its industrial areas to support the SDGs, Paris Agreement and European Union (EU) Green Deal. Smart city projects in the area provide an opportunity to put many of these ideas into action.⁸

Other initiatives to support sustainable development in Thailand include the Department of Alternative Energy Development and Efficiency's plans for an Energy Performance Certificate pilot program targeting up to 30 manufacturing facilities with high greenhouse gas (GHG) emissions.

Thailand's Low Carbon City Program comprises 25 municipalities, most of which plan to make green investments to reduce local greenhouse gas emissions, through initiatives such as waste-to-energy projects. This may be expanded on a provincial level. The country has received support from the World Bank's Partnership for Market Readiness (PMR), a technical assistance program, for this project and to develop

carbon pricing instruments to help reduce GHG emissions. It has been recognized as one of the most advanced countries in the region in terms of the development and implementation of carbon pricing.⁹

These government projects and policies are critical for creating not only the policy environment and legal frameworks required to support sustainable development, but also the public spending, infrastructure development and incentives needed to attract the investment without which the country would not be able to achieve the goals established under the BCG and related strategies.

Banks and financial institutions will play a critical role in facilitating financing and investment for projects initiated under these policies and as part of the broader development of sustainable finance in Thailand.

Creating Regulatory Frameworks to Support Sustainable Finance

Thailand's financial regulators are implementing initiatives, policies, and guidelines to support the development of sustainable finance in the country and to ensure banks, financial institutions, listed companies and other businesses adhere to the ESG principles that are essential to the development of a sustainable economy.

The Bank of Thailand, the Finance Ministry's Fiscal Policy Office, the Securities and Exchange Commission (SEC), the Office of Insurance Commission (OIC) and the Stock Exchange of Thailand (SET) have established the Working Group on Sustainable Finance to develop the Sustainable Finance Initiatives for Thailand. This aims to "advance the development and implementation of policies that will direct the future of the Thai financial system towards sustainability". It envisions that the Thai financial sector will play a significant role in financing the real economy's transition towards sustainability and "to effectively manage financial risks stemming from climate change, environmental degradation, governance and social issues."¹⁰

The Initiatives proposed by the Thai authorities and financial regulators aim for the sustainable transformation of the financial sector by December 2025. Thai

financial institutions are expected to play a crucial role in supporting the real economy in the transition and managing the ESG risks. Five Key Strategic Initiatives (KSI) are detailed in the Initiatives which are: (1) developing a practical taxonomy; (2) improving the data environment; (3) implementing effective incentives; (4) creating demand-led products and services; and (5) building human capital. It is worth noting that this joint effort by the authorities and regulators, built upon technical advice by global institutions such as the World Bank, will provide a good foundation for Thailand's sustainable finance aspirations.

The EU's Green New Deal requires products, including Thai imports, to meet more stringent ESG regulations which may result in many businesses having to invest more in energy reduction and energy efficiency to comply.¹¹

Credit ratings agencies, such as Moody's, are also updating their ESG classifications to bring them in line with the current environment, which may affect company ratings in the longer term.¹²

This snapshot helps show how regulatory carrots and sticks are being developed domestically and internationally to incentivise and coerce Thai companies to become more sustainable. The banking and financial sector will also be governed by these changes and will play a key role in helping clients make the required transitions. Nonetheless, a key success factor is to ensure an ecosystem is established that engages all stakeholders with proper design of incentives. One option is to have a platform where capacity building is made available to small firms and entrepreneurs which may have the aspiration but lack the knowledge or resources for the transition to the new sustainable economy.

Sustainable Bonds and Loans Issuance in Thailand

Thai companies have pioneered a range of sustainable finance instruments over the past three years, from green bonds to sustainability-linked bonds. The government was also the first in ASEAN to issue a sovereign sustainability bond, leading the CBI to name the country a Sovereign Green Market Pioneer at the 2021 Climate Bonds

Awards.

Bangkok Bank has played a leading role in the development of green finance in Thailand, arranging about 70% of all government and non-government bonds issued since 2019.¹³ Three key sustainability bond issuances over the past three years were made by BTS Group Holdings PCL (BTS Group), the Public Debt Management Office and Indorama Ventures. These are covered in more detail below.

BTS Group, the majority shareholder of Bangkok Mass Transit System PCL (BTSC), the operator of the BTS Skytrain and the Bangkok BRT, in 2019 issued Thailand's first Green Bond under the SEC's Green Bond Notification. BTS Group Green Bond, which raised THB20 billion and was eight-times oversubscribed, was issued to finance construction of an extension to the BTS Skytrain and divided into a series of five tenors with semi-annual coupon payment. It received an "A" rating by Tris Rating and complied with the International Capital Market Association's (ICMA) Green Bond Principles and the CBI Climate Bonds Standard, in the low carbon transport criteria.¹⁴

Since then, BTS Group has issued two more green bonds to finance additional extensions to the mass transport system. In October 2020, its second green bond was more than 3.3 times oversubscribed the initial target issue size of THB5 billion.¹⁵ Then in November 2021, a third green bond was issued raising THB10.2 billion which was more than twice oversubscribed.¹⁶ Bangkok Bank was joint lead arranger on all three BTS Group green bonds.

In 2020, the Thai government's Public Debt Management Office issued its first sovereign sustainability bond totalling one trillion baht to enable the government to meet its funding needs during the COVID-19 pandemic while increasing the diversity of its funding instruments and supporting the SDGs.¹⁷ Thailand was the first Southeast Asian nation to issue such a bond. The funds raised had both green and social components, financing green infrastructure through the Mass Rapid Transit system in Bangkok, as well as social projects to assist with COVID-19 recovery, such as public health measures, job creation programs and local public infrastructure development. The green aspect of the bond was certified against the low-carbon transport criteria of the Climate Bonds Standard.¹⁸ Bangkok Bank was a joint green structuring advisor and joint lead manager.

In November 2021, Indorama Ventures, a Thailand-based global chemical company, issued Thailand's largest sustainability-linked bond worth THB10 billion.

The triple-tranche bond was aligned with internationally accepted standards including the ICMA's Sustainability-Linked Bond Principles and the Loan Market Association's (LMAs) Sustainability-Linked Loan Principles. It was the first SLB in Thailand to be offered to both institutional and high net worth investors. The bond is linked to the company's sustainability performance in three key areas: reducing GHG emissions intensity by 10% from a 2020 base by 2025, increasing recycling of PET bale input to 750,000 tons per year by 2025, and achieving 25% renewable electricity consumption in 2030. Bangkok Bank was a joint arranger and joint bookrunner.

Thailand led sustainability bonds issuance across ASEAN from 2015–20, accounting for 40% in cumulative volume, according to the CBI. This reached an all-time high of about 70% in 2020 alone.

Given these positive developments, the number of companies and public-sector organisations issuing sustainable bonds and loans is expected to grow in the coming years.

Developing Financial Solutions to Social Issues

Sustainable finance extends far beyond the issuance of green bonds and loans. Banks and financial institutions, as essential service providers, can support broader social and environmental goals. Notwithstanding issues of governance and ensuring customers and suppliers within its supply chain, or those of its customers, meet ESG requirements to strengthen sustainable economic, environmental and social development, banks can provide financial support during times of crisis as well as leveraging the benefits of digital transformation to expand financial inclusion and access to loans for individuals and businesses.

Banks in Thailand have played a critical role in supporting businesses and people by extending affordable loans during the COVID-19 crisis. The Bank of Thailand the Finance Ministry and the Thai Bankers' Association, introduced a range of measures to support businesses, especially small and medium-sized enterprises (SMEs) and those in hard hit sectors such as restaurants, hospitality and tourism, as

well as working people, many of whom saw a reduction in income or job loss, by providing liquidity for SMEs and retail debtors and easing debt payments.

The ongoing development of digital financial and payment services and electronic Know Your Customer (eKYC) solutions in Thailand has enabled banks to not only help expand financial inclusion, which is a key policy of the government and central bank, it has also helped ensure emergency COVID-19 support payments could be distributed to people rapidly and securely while reducing the incidence of fraud.

This was supported by Thailand's National Digital ID (NDID) platform to provide digital identity authentication and proof of authenticity of a transaction. The first use case for NDID was in the banking industry, enabling new bank accounts to be opened using biometric data (fingerprint, facial recognition) to identify and authenticate people. Once customers have enrolled in the NDID program they can perform cross-authentication with other banks with whom they have a relationship and later with other industries and government agencies.

As with many markets, the pandemic saw the acceleration of cashless payments and digital transactions. In Thailand adoption was further supported by the government's digital welfare payments platform and e-wallet, as part of the national digital payments' strategy. Initially this was used to make the payment of monthly welfare allowances more efficient and to reduce leakage and fraud. While the amounts were relatively small, about USD10-15 a month, it ensured the money was received by the right people, who were also provided with a cash card. This will support sustainability of future financial systems, with more vendors accepting digital payments.

Not only will digital technology enable banks to extend services to unbanked and underbanked people in Thailand, harnessing the power of financial transaction data will enable banks to gain more accurate insights into a customer's risk profile and enable them to provide access to credit and microloans as responsible lenders.

Banks can also play a key role in the development of Open ID as trusted verifiers for both consumers and businesses within the e-commerce and digital finance ecosystem because of their robust security, data protection, KYC and anti-money laundering systems. Not only can banks help retail customers in this area, but they can also enable SMEs to play a more integrated role in e-commerce. Typically small businesses do not have the money or expertise need-

ed to develop and maintain their own customer data protection systems. By acting as their trusted verifier, banks can give them access to wider markets as customers can make online payments with confidence.

These cases demonstrate how technological and financial innovations can help the country speed up financial inclusion amid the crisis and pave the way for the country to use them for sustainable finance, particularly for social purposes.

Opportunities and Challenges Facing the Thai Financial Sector

The rapid development of domestic and international ESG regulations will pose a challenge for a range of businesses that will have to spend an increasing amount of their time, money and resources keeping up to date with the latest developments that could affect their business operations. This could cause issues for banks, as businesses that are unable to make the transition may be less viable and less able to repay loans.

At the same time, this creates an opportunity for banks to go beyond their traditional role as financiers by supporting their customers by providing advice on how to operate effectively and compliantly in the ESG environment. And in the ASEAN context where large conglomerates are undergoing their own transition, their suppliers or buyers in the supply chain will have to follow suit. Financial innovations and solutions can be important tools to support the transition. This will also open up opportunities for start-ups and FinTech firms to fill the technology gap, working side by side with traditional financiers.

Banks in Thailand have an opportunity to develop their expertise as providers of sustainable finance, especially in terms of ESG bonds and loan issuance. As stakeholders and regulators increase their demands for companies to do business in a sustainable manner, companies will be looking for new kinds of financial instruments.

Bangkok Bank, as Thailand's leading corporate bank, is the major financier for large-scale industries such as construction, energy and automotive, and is in the pole position to support Thailand's sustainable development. It can do this by supporting

clients to raise finance on the capital markets, invest in carbon credits, and keep abreast of global industry trends and regulations. This includes financing investments in renewable energy and public infrastructure projects, energy efficient manufacturing processes and products, emerging green industries, and business transitions, such as from the production of internal combustion engine vehicles to electric vehicles and batteries.

Furthermore, as the country's most international bank and the 6th largest ASEAN regional bank by assets, the bank's expertise can also support companies operating in other parts of Southeast Asia. This is especially the case for the countries clustered around the Mekong—notably Cambodia, Laos, Myanmar and Vietnam, known as CLMV—and Indonesia. This group of countries has been rapidly developing and has one of the highest growth rates in the world. Within the space of a few short decades, they have moved from predominantly agrarian societies to low-cost manufacturing bases attracting investment from around the globe. Now, with a wave of technological advancements coupled with a heightened focus on environmental and social concerns they can leapfrog ahead to an exciting and sustainable future.

Notes

- 1 ESG bond issuance likely to reach B100bn this year <https://www.bangkokpost.com/business/2122391/esg-bond-issuance-likely-to-reach-b100bn-this-year>
- 2 Climate Bonds Initiative's *ASEAN Sustainable Finance State of the Market 2020* <https://www.climatebonds.net/files/reports/asean-sotm-2020.pdf>
- 3 Philosophy of Sufficiency Economy <https://www.chaipat.or.th/eng/concepts-theories/sufficiency-economy-new-theory.html>
- 4 Thailand to reach net-zero emissions by 2050 if supported: PM Prayut <https://bkktribune.com/thailand-to-reach-net-zero-emissions-by-2050-if-supported-pm-prayut/>
- 5 Thailand proposes carbon neutrality by 2065-2070, bets on CCUS <https://www.spglobal.com/platts/en/market-insights/latest-news/energy-transition/082721-thailand-proposes-carbon-neutrality-by-2065-2070-bets-on-ccus>
- 6 Supporting Thailand's Climate Goals through the World Bank Partnership for Market Readiness <https://www.worldbank.org/en/results/2021/11/15/supporting-thailand-s-climate-goals>



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- 7 Eastern Economic Corridor (EEC) <https://thaibmbdc.org/eastern-economic-corridor-eeec/>
 - 8 Sustainability in the EEC <https://www.eeco.or.th/en/news/357>
 - 9 Supporting Thailand's Climate Goals through the World Bank Partnership for Market Readiness <https://www.worldbank.org/en/results/2021/11/15/supporting-thailand-s-climate-goals-through-the-world-bank-partnership-for-market-readiness>
 - 10 Sustainable Finance Initiatives for Thailand https://www.bot.or.th/Thai/SustainableBanking/Documents/Sustainable_Finance_Initiatives_for_Thailand.pdf
 - 11 The EU Commission is therefore proposing a Carbon Border Adjustment Mechanism to ensure that the price of imports reflects more accurately their carbon content. <https://www.nortonrosefulbright.com/en-th/knowledge/publications/c50c4cd9/the-eu-green-deal-explained>
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 - 13 South-east Asia catches the sustainability bug, The Banker, <https://www.thebanker.com/Sustainability/South-east-Asia-catches-the-sustainability-bug>
 - 14 BTSGreenBond receives well-responded from institutional and high-net-worth investors <https://www.btsgroup.co.th/en/update/news-event/505/bts-group-green-bond-receives-well-responded-from-institutional-and-high-net-worth-investors>
 - 15 BTS Group Announce the Success of the 2nd Green Bond Issuance with more than 3.3 times Oversubscription <https://www.btsgroup.co.th/en/update/news-event/631/bts-group-announce-the-success-of-the-2nd-green-bond-issuance-with-more-than-33-times-over-subscription>
 - 16 BTSC Successfully Issued THB 10.2 Billion Green Bonds Emphasizing BTS Group Commitment in Serving our Community with Sustainable Solutions <https://www.btsgroup.co.th/en/update/news-event/720/btsc-successfully-issued-thb-102-billion-green-bonds-emphasizing-bts-group-commitment-in-serving-our-community-with-sustainable-solutions>
 - 17 2020 Sustainability Bond Interim Report A Year of Accomplishments, Public Debt Management Office, <https://www.pdmo.go.th/pdmedia/documents/2021/Feb/Minister%20Approved%202020.pdf>
 - 18 Climate Bonds Initiative's ASEAN Sustainable Finance State of the Market 2020 <https://www.climatebonds.net/files/reports/asean-sotm-2020.pdf>

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Dr. Thaweelap Rittapirom is a member of the board and an executive director of Bangkok Bank Public Company Limited, one of South-east Asia's largest regional banks, a market leader in business banking, and Thailand's largest retail customer base.

He began his banking career as an in-house counsel before becoming a manager in the special asset management unit. He was then appointed branch manager of the bank's New York office before returning to Bangkok Bank's head office to take up his current position.

At the Thai Bankers' Association, he is involved in a number of initiatives regarding regulatory and regional integration implications. He also serves on the advisory board of Thammasat University Law School and is President of the University of Chicago Club of Thailand.

He earned a doctoral degree from the University of Chicago, USA and a law degree from Thammasat University, Bangkok, Thailand.