Kingdom of Thailand

Sustainable Financing Framework

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1 Introduction and rationale

The Kingdom of Thailand ("KOT") has established this Sustainable Financing Framework ("Framework") to support its sustainability commitments and to set out how it intends to raise Green, Social and Sustainability financing instruments. With this Framework, and any financing under this Framework that may follow, KOT intends to contribute to the development of the Sustainable Financing market domestically in Thailand, as well as internationally.

The Kingdom of Thailand is committed to deal with climate change following the Paris Agreement and support the United Nations Sustainable Development Goals to combat with poverty, inequality, environmental degradation, health, and justice by 2030.

1.1 The Kingdom of Thailand's contribution to the United Nations Sustainable Development Goals (UN SDGs)

The Twelfth National Economic and Social Development Plan (2017-2021) shares the vision of Thailand's 20-year National Strategy, which is "Thailand as a developed country with security, prosperity, and sustainability in accordance with the principles of the Sufficiency Economy Philosophy". The targets and indicators of the Twelfth Plan have been set according to the targets of the 2017-2036 National Strategy, and are also in line with the economic, social, and environmental objectives which have been developed by the international organizations, such as the SDGs.



Source: sustainabledevelopment.un.org

Thailand has also chosen to adopt the Sufficiency Economy Philosophy (SEP) of His Majesty the late King Bhumibol Adulyadej, Rama IX as the pathway to achieve the 17 the United Nations Sustainable Development Goals and develop Thailand to an integrated social and environmental economy.

The principle of SEP is a development approach creating sustainable development through integration of the physical, social and spiritual dimension. It provides orientation for sustainable mindset and lifestyle using both knowledge and virtues for decision-making. The SEP has been and continues to be a vital element of development strategy as it underpins the promotion of moderation, reasonableness, and prudence.

Moderation

In Thailand, moderation will be an important principle for achieving the SDG targets such as less wasteful consumption and production patterns, the curbing of fossil fuel usage, and sustainable management of marine



Reasonableness

Reasonableness refers to thoughtful consideration of the impact that our actions and decisions may have both on others and the world around us. Considering the SDGs, reasonableness has numerous practical applications in global issues of climate change, equality, justice, developing clean energy sources and reducing pollution.

<u>Prudence</u>

Prudence is about assessing potential risks, working methodically and achieving a level of competence and selfreliance before proceeding further. It is also about people taking care not to overreach their capabilities. This principle may apply to almost all of the SDGs including health, food, water and energy security in particular.





In 2017, the National Science Technology and Innovation Policy Office, announced the strategic 20-year plan for human resources development in research and innovation, which aims to upgrade highly-skilled labor forces and establish a high-quality educational system for talented students for driving Thailand towards becoming a high-income nation by 2036.

The Ministry of Health also announced its plan "eHealth Strategy 2017 – 2026", which aligns with the 20year national strategy on public health and Digital Economic and Social Development Plan to broaden opportunities to access health care system, improve social equality and equity, reduce costs in public health management, and provide seamless service and secure sharing of healthcare data. In 2020, the KOT announced the higher education, science, research and innovation policy and strategy framework to develop domestic education for preparing Thai people for the 21st century and to develop a balanced economy, stable society, and sustainable environment, which it aims to achieve in 2027.

1.2 The Kingdom of Thailand's consistent commitment to address climate change following the Paris Agreement

Ahead of the Paris Agreement in 2015, the KOT submitted an Intended Nationally Determined Contribution (INDC) plan to the United Nations Framework Convention on Climate Change (UNFCCC), which aims to limit global warming to 1.5° C and reduce CO₂ emissions to 20% - 25% by 2030^{1} , which is below the business as usual. This plan also includes the Power Development Plan (2015 - 2036), Thailand Smart Grid Development Master Plan (2015 - 2036), Alternative Energy Development Plan (2015 - 2036), Environmentally Sustainable System Plan (2013 - 2036), National Industrial Development Master Plan (2012 - 2031), and Waste Management Roadmap.

The Climate Change Master Plan (2015-2050) was developed by the Office of Natural Resources and Environmental Policy and Planning (ONEP), under the direction of the Ministry of Natural Resources and Environment as a continuous framework of integrated policies and action plans relating to climate change. The plan lays out a vision to achieve climate-resilience and low carbon growth in line with the Sustainable Development Goals ("SDG") by 2050. Thailand's National Adaptation Plan (2015-2023) is currently being drafted and in the process of establishing a work plan.

In 2016, the KOT set a national agenda on Municipal Solid Waste Management (Pollution Control Department, Ministry of Natural Resources and Environment), which targeted to ensure healthy lives and promote well-being, develop sustainable management of water and sanitation, and ensure sustainable consumption and production patterns.

Thailand's National Adaptation Plan ("NAP") was approved in 2018 by the National Committee on Climate Change Policy ("NCCC"). It is built on the six priority sectors identified in the Climate Change Master Plan. The NAP aims to help Thailand become resilient and adapt to the impacts of climate change. The country would thereby achieve sustainable development aligned with its main principles, including the sufficiency economy principle, sustainable development pathway and local wisdom.

In 2019, the KOT approved the Roadmap for Plastic Waste Management 2018 – 2030 framework. The objectives are to reduce and stop the plastic usage and replace it with environmentally friendly materials.

In 2020, The Ministry of Energy announced its national energy development strategies, which included power development plan (PDP), alternative energy development plan (AEDP), energy efficiency plan (EEP), and gas plan (GP) that it aims to achieve by 2037.

¹ Business-as-usual projection from reference year 2005 in the absence of major climate change policies

2 Kingdom of Thailand's Sustainable Financing Framework

KOT has established this Sustainable Financing Framework as a logical next step to Thailand's pioneering sustainability commitments and ambitions outlined above. The projects financed under the Sustainable Financing Framework target climate change mitigation and adaptation, sustainable use and protection of water resources, protection and restoration of biodiversity and ecosystems, as well as fostering social development, socioeconomic advancement and empowerment to ensure positive social contribution and to fight against inequality in Thailand.

This Sustainable Financing Framework has been established in line with the most recent available versions of:

- the Green Bond Principles ("GBP") and Sustainability Bond Guidelines ("SBG"), issued by the • International Capital Market Association (ICMA) in June 2018², and Social Bond Principles ("SBP"), issued by ICMA in June 2020³,
- the ASEAN Green Bond Standards ("GBS"), ASEAN Social Bond Standards ("SBS") and ASEAN Sustainability Bond Standards ("SUS"), issued by the ASEAN Capital Markets Forum (ACMF) in October 2018⁴, and
- the Green Loan Principles ("GLP") issued by the Loan Market Association (LMA) in May 2020⁵.

In line with the above, the Framework covers the following core elements:

- 1. Use of Proceeds
- 2. Process for Project Evaluation and Selection
- 3. Management of Proceeds
- 4. Reporting
- 5. External Review

KOT will aim to adhere to best practices in the market and will review the Framework's alignment to updated versions of the Green and Social Bond Principles, Sustainability Bond Guidelines and Green and Sustainability Linked Loan Principles as and when they are released. As such, this Framework may be updated and amended in the manner described in Section 3 ("Amendments to this Framework") below.

⁴ In alignment with ACMF Green Bond Standards, October 2018, <u>https://www.theacmf.org/initiatives/sustainable-finance/asean-green-bond-</u> standards, ACFM Social Bond Standards, October 2018, https://www.theacmf.org/initiatives/sustainable-finance/asean-social-bond-standards and ACFM Sustainability Bond Standards, October 2018, https://www.theacmf.org/initiatives/sustainable-finance/asean-sustainability-bond-standards. The ASEAN GBS, SBS and SUS are intended to provide additional guidance on the application of the ICMA GBP, SBP and SBG, as well as to enhance transparency, consistency and uniformity of ASEAN Green, Social and Sustainability Bonds

² In alignment with ICMA Green Bond Principles, June 2018, <u>https://www.icmagroup.org/green-social-and-sustainability-bonds/</u> green-bond-principles-gbp/and ICMA Sustainability Bond Guidelines, June 2018, https://www.icmagroup.org/green-social-and-sustainabilitybonds/sustainability-bond-guidelines-sbg/

³ In alignment with ICMA Social Bond Principles, June 2020, <u>https://www.icmagroup.org/green-social-and-sustainability-bonds/social-bond-principles-</u>

⁵ In alignment with LMA Green Loan Principles, May 2020, <u>https://www.lsta.org/content/green-loan-principles/</u>

2.1 Use of Proceeds

An amount equal to the net proceeds of Green, Social or Sustainability financing instruments, issued by the KOT under this Framework, will be exclusively used to finance and/or refinance, in whole or in part, expenditures directly related to eligible Green and/or Social projects ("Eligible Green and Social Projects") in the Eligible Green and Social Categories (as defined below).

Eligible Green and Social Projects can include government loans or expenditures in the form of direct investment expenditures, subsidies, fiscal measures and selected operational expenditures (including funding for state agencies, local authorities and companies instrumental to deploying the Thailand's sustainability strategy). The Eligible Green and Social Projects are limited to Government Budget in the two budget years preceding the issuance, the budget year of issuance, and future budget years.

2.1.1 Eligible Green Project Categories

Eligible Green Categories	Alignment with ICMA GBP	Eligible Projects Description	Alignment with UN SDGs
Clean Transportation	Clean Transportation	Construction and maintenance of the Government's green transport projects, which promote clean transport services and modal shift	11 SUSTAINABLE CITHS AND COMMUNITIES
		towards public transportation, including Mass Rail Transport systems and Electric Vehicle infrastructure	13 CLIMATE
Renewable Energy	Renewable Energy	Expenditures to support the development, installation, operation and connection of renewable energy, including:	7 CLEAN ENERGY
		 Solar Wind Small-scale hydropower⁶ 	13 CLIMATE
		Improvement of the energy efficiency of infrastructure, which results in an energy consumption of at least 10% below the average national energy consumption of an equivalent infrastructure	7 AFFORDABLE AND CLEAN ENERGY
Energy Efficiency	Energy Efficiency	 Research and development of products or technology ("R&D") and their implementation that reduces 	13 CLIMATE

⁶ Only eligible when capacity is less than 25 MW

		energy consumption of underlying asset, technology, product or system(s)	
		<u>Exclusions</u> : Projects related to industrial facilities and equipment that may lead to a lock-in to fossil fuels	
Sustainable water and wastewater management	Sustainable water and wastewater management	Expenditures for provision of clean water, wastewater prevention, sewage treatment, sustainable water management, flood mitigation and water storage (this includes the construction, maintenance and upgrading of water storage (such as weirs and check-dams) to increase reliability, efficiency, sustainability and reduce water loss)	6 CLEAN WATER AND SANITATION (CONSUMPTION AND PRODUCTION
Environmentally sustainable management of living natural resources and land use. &Terrestrial and aquatic biodiversity conservation	Environmentally sustainable management of living natural resources and land use. Terrestrial and aquatic biodiversity conservation	Including the following (alongside reputable third-party certifications that can be used to qualify eligible projects): Environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural terrestrial and marine landscapes. The protection of coastal, marine and watershed environments <u>Exclusions</u> : Expenditures associated with equipment that represents a lock-in to fossil fuels	14 LIFE Second Water 15 LIFE 15 LIFE UN LAND
Commercial, public and residential buildings	Green Buildings	 Commercial, public and residential buildings (existing and new construction), including: Buildings certified to an acceptable level under an internationally recognised green building certification scheme⁷, or Buildings that achieve a minimum 20% improvement in energy use and/or carbon emissions compared to a mandated local or regional 	7 AFFORDABLE AND CLEAN ENERGY CLEAN ENERGY CLEAN ENERGY AND COMMUNITIES

⁷ EDGE (Certified), BREEAM (Very Good or higher), LEED (Gold or above), Green Mark (Gold or above)

8

baseline or code



2.1.2 Eligible Social Project Categories

Eligible Social Categories	Alignment with ICMA SBP	Eligible Project Description	Alignment with UN SDGs
g	Employment generation including through the potential effect of SME financing and microfinance	Micro Small and medium-sized enterprise (MSME) loans that support employment generation in small businesses	8 DECENT WORK AND ECONOMIC GROWTH
generation		 Target populations: Women or women-led SMEs⁸ Rural SMEs Disabled-led SMEs 	
Employment generation (COVID-19 financing)	Employment generation including through the potential effect of SME financing and microfinance	Small and medium-sized enterprise ⁹ (SME) loans that support employment generation in small businesses and Income support & Unemployment Benefits	8 ECONOMIC GROWTH
		Target populations: SMEs and populations that apply for funding, including employees or freelancers affected as a result of spread of infectious diseases such as COVID-19, as well as farmers registered with Ministry of Agriculture and Cooperatives	

Healthcare

Access to essential services

Financing to construct, equip and operate hospitals, clinics and health care centres for the provision of public or subsidized health services



⁸ (a) at least for 51% owned by a woman or by women, or (b) (i) at least for 20% owned by a woman or by women, (ii). with a woman as CEO, COO, President or Vice President and (iii) if such enterprise has a board of directors, with at least 30% of such board of directors comprised of women ⁹ The Ministry of Industry definition of SME according to the Ministerial regulation issued in 2002 applies

Healthcare (COVID-19)	Access to essential services	 Expenditures to increase capacity and efficiency in provisioning healthcare services The construction, maintenance of facilities and the manufacture, supply of equipment and medical supplies, including but not limited to, as a response to the spread of infectious diseases such as COVID-19 The provision of emergency medical 	3 GOOD HEALTH AND WELL-BEING	
		response and disease control services	V	
		 R&D and manufacturing for equipment for the provision of emergency medical response and disease control services Provision / distribution of healthcare equipment and public services 		
Education and Vocational Training	Access to essential services	Development and operation of fee-free schools, training centres and related facilities, including digital learning platforms, as well as training labour force, in order to improve quality of and access to education, promote learning opportunities and vocational training, facilitate socioeconomic advancement and empowerment, and reduce social inequalities	4 QUALITY EDUCATION	
		Target populations: People from low- income families and/or from disadvantaged backgrounds ¹⁰ ; people with disabilities; the unemployed		
Affordable Housing	Access to essential services	The development and/or provision of affordable and low-income housing	11 SUSTAINABLE CITIES	
		Target population: Those registered under State Welfare earning less than THB 35,000 / month	1 ^{N0} Poverty 术: 在 常:	
Food Security	Food security and sustainable food systems	Guaranteeing effective access to varied, quality food via provision of production subsidies to small and medium farmers for basic food products under the New Theory	2 ZERO HUNGER	
Affordable Housing	Access to essential services	advancement and empowerment, and reduce social inequalities Target populations: People from low- income families and/or from disadvantaged backgrounds ¹⁰ ; people with disabilities; the unemployed The development and/or provision of affordable and low-income housing Target population: Those registered under State Welfare earning less than THB 35,000 / month Guaranteeing effective access to varied, quality food via provision of production subsidies to small and medium farmers for basic food	1 Poverty	

 $^{^{\}rm 10}$ KOT is focusing on, however not exclusively, the people who earn less than 30,000 Thai Baht per year

Agriculture Project

2.1.3 Exclusions

For the avoidance of doubt, any expenditure related to the following activities will be excluded from Eligible Green and Social Projects:

- Exploration, production or transportation of fossil fuel;
- Large scale hydropower plants (>25MW capacity);
- Generation of nuclear power;
- Biomass plants, waste to energy power plants and geothermal plants with CO₂ emission level of more than 100g CO₂ /kWh;
- Manufacture and production of finished alcoholic beverages;
- Lethal defence goods;
- Military contracting;
- Gambling;
- Weaponry;
- Non-RSPO-certified palm oil;
- Manufacture and production of finished tobacco products; and
- Conflict minerals
- Activities/projects associated with child labor/forced labor

2.2 Process for Project Evaluation and Selection

For the governance of KOT's Sustainable Financing Framework, the Ministry of Finance has set up a Committee consisting of the following members:

- Public Debt Management Office ("PDMO")
- Budget Bureau
- Office of the National Economic and Social Development Council
- State Enterprise Policy Office
- Office of Natural Resources and Environmental Policy and Planning
- The Securities and Exchange Commission
- Thai Bond Market Association

The Committee will review potentially qualifying projects and verify whether these comply with the criteria and definition of Eligible Green and Social Projects set out in Section 2.1. of this Framework. The projects approved as Eligible Green and/or Social Projects by the Committee may be listed for the Use of Proceeds of any Green, Social and/or Sustainability financing instruments issued under this Framework.

The Ministry of Finance is in charge of coordinating this process, and the relevant ministries will be responsible for providing the requested documents and any further information to verify eligibility.

The Committee may consult with other Government departments and agencies in carrying out its responsibilities. Selected representatives from the main ministries in charge of the execution of the public budget, and/or ministries responsible for the projects being considered may form a part of the Committee on

a case-by-case basis, for the purposes of the Process for Project Evaluation and Selection under this Framework.

The Committee will maintain notes and records of all Eligible Green and Social Projects reviewed and to be funded by the Use of Proceeds of each Green, Social and Sustainability financing instrument issued.

The Committee will monitor that Eligible Green and Social Projects continue to meet the Eligibility Criteria set in the Framework until the proceeds have been allocated. The Committee, with the assistance of the respective ministries utilising the proceeds if needed, shall track and monitor the environmental and social benefits of the Eligible Green and Social Projects which are funded by the KOT's Green, Social or Sustainability financing instruments.

2.3 Management of Proceeds

The allocation and tracking of the Green, Social and Sustainability financing instrument proceeds will be done by the Committee. KOT intends to allocate 100% of an amount equal to the net proceeds of a Green, Social or Sustainability financing instruments issued under this Framework to funding Eligible Green and Social Projects and will, on an ongoing basis, monitor the allocated funds as a part a formal internal process thereafter.

The net proceeds of any Green, Social and Sustainability financing instruments will be transferred to the government treasury reserve account of the Kingdom of Thailand. The Committee will ensure that the allocation of proceeds does not allow for listing of the same Eligible Green or Social Project twice. The balance of the net proceeds will be periodically adjusted to match allocations to eligible Green and Social Projects made during the life of the financing instruments.

The [Committee] shall maintain an allocation register (the "Register") to record the allocation of each Green, Social or Sustainability financing instrument proceeds. The Register will contain, for each such instrument issued, information including the details of each instrument's ISIN, pricing date and maturity date.

Pending the full allocation of the net proceeds to Eligible Green or Social Projects, any unallocated funds will be managed per The Comptroller General's Department's policy, and invested in temporary liquid instruments (cash or cash equivalents).

2.4 Reporting

For issuances under this Framework, the Committee plans to disclose the allocation of the amount equal to the net proceeds, on an annual basis starting one year from the first Green, Social or Sustainability financing instrument issuance, until the full allocation of the net proceeds to the Eligible Green or Social Projects, and as necessary in the event of any material changes.

The Committee plans on reporting on the associated environmental and social benefits on an annual basis starting one year from the first Green, Social or Sustainability financing instrument issuance until the full allocation of the proceeds.

The report(s) will be made available to investors on PDMO's website (https://www.pdmo.go.th/en).

Allocation Reporting

Where feasible, the Committee will aim to report the following information:

- The percentage of an amount equal to the net proceeds allocated to Eligible Green and/or Social Projects
- The percentage of financing/refinancing of projects
- A breakdown of allocated amounts to Eligible Green and Social Categories, and the relevant Ministry/Ministries responsible for the projects financed

Impact Reporting

Where feasible, the Committee will aim to report on the estimated environmental and social impacts arising from the implementation of the Eligible Green and Social Projects.

In case of co-financing, the Committee will aim to report on the pro rata share of impact or provide the share of financing from Green, Social or Sustainability financing instrument proceeds as a percentage of total project financing if total project impact is being reported.

The impact reporting will also provide information on the methodology and assumptions used for calculation of the impact metrics.

Example impact reporting metrics:

Eligible Green/ Social Category	Examples of impact indicators	
Clean Transportation	 Reduced and/or avoided GHG emissions (in t. CO₂e /year) Reduction in energy consumption Modal shift: # of passengers transferred to the train and/or passenger kilometres Estimated reduction in car use in number of kilometres driven or as share of total transport ridership Estimated reduction in fuel consumption Total in kilometres of new or improved train lines 	
Renewable Energy	 Expected annual renewable energy generation (MWh/y) Reduced and/or avoided GHG emissions (in t. CO₂e /year) 	
Energy Efficiency	Minimum energy efficiency improvement achieved (%)	
Sustainable water and wastewater management	 Annual reduction in water consumption, measurable improvement in water quality or project-specific targets and results Percentage/size of populations provided access to clean water and/or sanitation 	
Environmentally sustainable management of living natural resources and land use & Terrestrial and aquatic	 Coastal Total surface financed (hectares) Forests and forestry Forest area (hectares) Forestry certification scheme (if applicable) Net carbon sequestration (tonnes per year) (if available) Fishery Certification scheme 	

biodiversity conservation	 Type of fish (if available)
Commercial, public and residential buildings	 Number, type and rating of green building certifications obtained Total gross floor area (GFA) of green buildings Annual amount of energy saved (MW) Reduced and/or avoided GHG emissions (in t. CO₂e /year)
Employment generation	 # of jobs created and/or retained # of people benefited # of loans to SMEs # of loans to microenterprises
Healthcare	# of people benefited
Education and Vocational Training	 # of people benefiting from vocational training and/or with better access to education # of students enrolled/educated # of classrooms/educational support facilities constructed/rehabilitated
Affordable Housing	• # of people with access to safe, affordable and sustainable housing
Food Security	 # people benefited # farmers benefitted

2.5 External Review

KOT has obtained a Second Party Opinion from Sustainalytics, an internationally recognised external verifier. The Second Party Opinion by Sustainalytics will be made available to investors on PDMO's website.

3. Amendments to the Framework

The Committee will review this Framework on a regular basis, including its alignment to updated versions of the Green and Social Bond Principles and Sustainability Bond Guidelines, Green Bond Standards and the Green Loan Principles and Sustainability Linked Loan Principles, as and when they are released, with the aim of adhering to best practices in the market. Such review may result in this Framework being updated and amended. The updates, if not minor in nature, will be subject to the prior approval of the KOT and a Second Party Opinion provider. Any future updated version of this Framework that may exist will either keep or improve the current levels of transparency and reporting disclosures. The updated Framework, if any, will be published on PDMO's website and will replace this Framework.