



PTT Green Bond Framework

- Sustainable Growth for All -



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1. Overview about PTT

PTT Public Company Limited, or PTT, is a national energy company that was established to ensure national energy security for Thailand. PTT operates under the oversight of the Ministry of Finance and the Ministry of Energy, and has been listed on the Stock Exchange of Thailand since 2001. The Company's vision is to become the premier Thai multi-national energy company, which is committed and dedicated to business development through creative innovations. Meanwhile, its mission is to achieve balanced care for all stakeholders through integrated energy and petrochemical business operations, from upstream to downstream, in 26 countries globally. This is achieved through PTT-operated businesses, consisting of the Natural Gas Business and International Trading Business, and PTT Group affiliates and subsidiaries, consisting of the Petroleum Exploration and Production Business, Petrochemical and Refining Business, Oil and Retail Business, Coal Business, and Technology and Engineering Business.



2. PTT Strategic Direction and Mission to Sustainable Development

Since its inception, PTT has grown a business based on national self-reliance. Its initial goal on energy independence has over time grown into development for the benefit of society and the country at large – PTT’s business objective to this day.

For more than four decades, PTT has been determined to take part in driving Thai society into a quality society while giving due support to communities to pursue sustainable self-development. PTT stresses application of its own experience and expertise for enhancing participatory development that benefits communities and society

Aiming for sustainability, PTT’s business strategy emphasizes participation in social and environmental care while striking a healthy balance in responding to all stakeholders. It recognizes the need to keep the three aspects of sustainability management (3Ps) in delicate balance. In addition to playing the role of a business entity serving the country’s energy security, underlying the economy (Prosperity), PTT values working from the policy level to the operation level for the benefit of society. This features human resource, community and social development (People) as the first aspect. Focus is placed on raising the caliber of human resources while strengthening community capability for self-reliance. Also, it values natural resource and environmental conservation (Planet) to safeguard natural resources and the environment in tandem with the creation of awareness of the need to do so and foster cooperation among various sectors. PTT has outlined a strategy and business direction based on the “3P” approach, which focuses on creating sustainable growth for all stakeholder, as following:

Prosperity

Create Sustainable Growth for the Thai Economy and Society. Operating with transparency and accountability, on the principles of good governance, enables PTT Group to recognize the importance of an organizational culture and mindset. These are what drive corporate governance according to the PTT Group Way of Conduct, which encourage collaborations within the Group on legal and regulatory compliance, and lead to the integration of corporate governance, risk, and compliance (GRC) concepts into organizational systems. These practices can then be implemented throughout the organization while creating sustained business growth in line with the PTT “3D” Strategy.

People

Developing Human Resources, Creating Quality Livelihoods and Inclusive Business Growth with Community and Society. Preparing the Company in terms of organizational and human resources management allows PTT Group to respond to current and future business conditions. In addition, a diverse organizational model and agile human resources management will enable PTT Group to effectively address its changing business operations as well as care for societies and communities. This will be achieved through a focus on inclusive development and building quality livelihoods and a strong economy for individuals in society. For example, through engagement in Thai science and technology education development with Kamnoetvidya Science Academy School (KVIS) and Vidyasirimedhi Institute of Science and Technology (VISTEC), and the promotion of social enterprises (SE), such as by providing job opportunities and income earning potential to the deaf or elderly through the Cafe Amazon for Chance coffee shop.

Planet

Conserving Natural Resources and the Environment, and Caring for Community and Society. Under the PTT Group Clean & Green Strategy, PTT Group aims to reduce greenhouse gas emissions from its operations by 20% compared to the business-as-usual scenarios by 2030 – a target that also aligns with Thailand’s national target. The Group is preparing to apply carbon pricing tools into investment decision processes by 2020, as well as preparing for the introduction of a carbon trading system or carbon tax. Not only that, it plans to apply a Circular Economy approach to the development of green innovations, which will create business opportunities for product and service development, foster collaborations within and outside of PTT Group, and finally, create positive value for the environment and society.



3. PTT's Commitment to United Nations Sustainable Development Goals (SDGs)

In line with international market practice and global trends, PTT is committed to operating on the foundations of good governance principles and respect for human rights, while promoting the development of community and the country. It is committed to supporting Thailand's National Strategy as well as the United Nations' Sustainable Development Goals (SDGs). PTT's Board of Directors approved integrating the SDGs into PTT's business development strategies and specifically focusing on 7 out of 17 goals, with the details as following:



- **SGD 7: “Affordable and Clean Energy”** – Ensure access to affordable, reliable, sustainable and modern energy for all
- **SDG 8: “Decent Work and Economic Growth”** – Promote inclusive and sustainable economic growth, full and productive employment and decent work for all
- **SGD 12: “Responsible Consumption and Production”** – Ensure sustainable consumption and production patterns
- **SDG 13: “Climate action”** – Take urgent action to combat climate change and its impacts
- **SGD 14: “Life below Water”** – Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- **SGD 15: “Life on Land”** – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss
- **SGD 16: “Peace, Justice and Strong Institutions”** – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



4. PTT’s Green Bond Framework

In order to finance PTT activities which are directly supporting green environments, PTT prepared this Green Bond Framework (the “ **Framework** ”), with an intention of issuing Green Bonds under this Framework. PTT aspires to fully comply with the ASEAN Green Bond Standards (“ **ASEAN GBS** ”) in terms of internal governance and eligible green project selection as applicable. The Framework was also designed to be in line with the Green Bond Principles 2018 by International Capital Market Association (ICMA), with the following four core components:

- 1) Use of Proceeds
- 2) Process for Project Evaluation and Selection
- 3) Management of Proceeds
- 4) Reporting

4.1 Use of Proceeds

The 100% of the net proceeds from each tranche of PTT’s Green Bond will be used exclusively to finance and/or re-finance eligible green projects which meet the criteria outlined below (Eligibility Criteria), in part or wholly as described below, and information on green projects will be available for investors.

Eligible Criteria

Eligible Criteria of Green Project	Green Project	PTT’s Eligible Project
Environmentally Sustainable Management of Living Natural Resources and Land Use	Green Project	<ul style="list-style-type: none"> ▪ Reforestation Projects (including but not limited to the long-term forest conservation project and Environmental Learning Centers)

In addition to the eligible criteria, the selection of the projects will also be based on Climate Bonds Initiative (CBI)’s Forestry Criteria as PTT has the intention to comply and obtain the Certification from Climate Bonds Initiative (CBI) for PTT’s Green Bond.

Brief Description of Reforestation Projects

PTT Reforestation Project is one of the PTT’s milestone missions involving the environment which was conceived in 1994 when the company volunteered to run a reforestation project on 1 million rai of land in honor of His Majesty the late King Bhumibol Adulyadej the Great on the 50th anniversary of his accession to the throne.

The project aimed to restore forest areas earlier encroached and destroyed. Target reforestation plots were scattered across the country covering evergreen forests on mountains in the North, deciduous forests on the plateaus of the Northeast, evergreen forests on the lower plains in the Central and Eastern Regions, and swamps and mangrove forests along both sides of the southern peninsula.

For the initial phase, the project lasted from 1994 to 2002, covering altogether 1,012,401 rai. Its completion could not have been realized without the support and continuous participation of government agencies and villagers around reforested areas, who helped guaranteed the survival of the forests. Long-term forest conservation which relies on community engagement is thus the key to project sustenance. From then until now, the project has expanded its scope into a larger scale with the current funding requirements expanding to more areas; such requirements ranges from (but not limited to “Reforestation and Ecology Project”, “Metro Forest Learning Center on Sukhaphiban 2 Road, Bangkok”, “Wang Chan Forest Learning Center”, “Sirinath Rajini Ecosystem Learning Center”, “ Reforestation Research & Knowledge Management Project”, “The Development and Promotion of the Utilization of Vetiver Grass Project According to the Royal Initiatives”, “Supporting Networks”, “Green Urban Development Project at The Rama IX reservoir under the royal initiative of His Majesty the King” and “PTT Development Project on Innovative Agriculture Learning Center of Chitralada Technology Institute for the Siam Boromrajakumari Foundation”.



Apart from the foresaid Funding, PTT also looks forward to promoting sustainability concept for both urban and local community in order to encourage the well-being of society.

4.2 Process for Project Evaluation and Selection

Project evaluation and selection is a key process in ensuring that the projects financed by the Green Bond meets the criteria in the Framework. PTT will conduct a thorough assessment of the nature of the projects and the funding requirement of the projects that will be financed with the proceeds raised from a Green Bonds issuance. It will also take into consideration the Forestry Criteria of Climate Bonds Standard as a benchmark to determine the eligibility of the reforestation projects. In particular, the evaluation and selection process will comprise of two main steps:

1) Evaluation

PTT internal team will review each proposed project together with potential project owners as per the criteria listed in the section “Use of Proceeds” above.

2) Approval

Any matters for approval on eligible green projects relating to the Framework shall first be discussed and approved in principal by Chief Financial Officer, and acknowledged by the Management Committee, which is composed of senior officers of PTT and chaired by the President and Chief Executive Officer.

4.3 Management of Proceeds

The net proceeds from the issuance of PTT’s Green Bonds will be held in internal treasury cash account of PTT before the allocation to equity and/or debt obligations associated with selected project(s) and/or asset(s). PTT will allocate net proceeds from the bonds to eligible project(s) and/or asset(s) within 24 months of issuance of the bond. For the unallocated portion, the proceeds will be held either in cash or cash equivalents in internal treasury cash account until allocated.

4.4 Reporting

Following the first anniversary of each Green Bond issuance and every year thereafter until the maturity of Green Bond, PTT will make information available to the public on the use of proceeds on a project-by-project basis and keep it up-to-date. The report will be readily available at the PTT’s website. (www.pttplc.com)

The annual report will include both allocation aspects as well as benefit impact from Green Bonds issuance.

1) Proceeds Allocation Reporting

PTT will update Allocation Reporting until the earlier of the maturity of Green Bond or the proceeds are fully allocated. The report will include a summary of the projects to which Green Bond proceeds has been allocated. The report may include the followings:

- Brief description and summary of projects financed by Green Bond
- Summary of the allocation of proceeds raised via Green Bond issuance to finance and/or refinance selected green projects
- Summary of unallocated proceeds

2) Impact Reporting

PTT will report a qualitative summary of benefits risen from selected green projects funded by Green Bond issuance. When available, PTT will report quantitative performance measures for the Green Bond. The report may include below impact indicators as follows:



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- Amount of CO2 emission reduction per year
 - Amount of forest areas increasing during the year
 - Amount of urban green areas increasing during the year



5. External Assurance

PTT would engage an independent party to issue a second party opinion on this Green Bond Framework and it will also apply for Certification from Climate Bonds Initiative (CBI) prior to the issuance of any PTT's Green Bond which normally entails an assessment of the alignment with the Green Bond Principles. The selected independent party will be engaged to provide pre- and post-issuance verification.