

PTT Green Bond Report 2021

Powering Life with Future Energy and Beyond –

Data as of 31 December 2021



PTT Sustainability Management Policy (Data as of 31 December 2021)

PTT has announced the "PTT Sustainability Management Policy" signed by the President and Chief Executive Officer to demonstrate commitment in sustainability management fully integrated into business operations. The policy focuses on three dimensions, which are the environment, social, and governance. However, PTT annually reviews policy to ensure alignment with the changing corporate contexts and material issues. Following reviews in 2021, it appears that the current policy continues to thoroughly address material issues of 2021 as well as this policy has been approved by the Board of Directors.

Corporate Sustainability Management Targets

Sustainability management is considered as a part of PTT business operation strategic framework, by assurance, the PTT by PTT (Powering Thailand's Transformation by Partnership & Platform, Technology for All, Transparency & Sustainability), within the section of Transparency & Sustainability. PTT focuses on creating transparency and developing business to foster sustainability, promoting performance align with Sustainable Development Goals (SDGs). PTT places an emphasis on fairly responding to the needs and expectations of all stakeholder groups and has established "Sustainability Strategic Direction" in its "2021 - 2025 Master Plan on Sustainability Management, Social and Environmental Responsibility". It comprises three dimensions, of which indicators, short/ medium/ long term targets, as well as implementation strategies to drive for success, have been established. All are in alignment with the 20-Year National Plan and facilitate the following SDGs.

- Environmental Strategic Direction: Sustainable Production and Consumption, comprises two strategies:
 - Develop towards low carbon society and environmentally friendly business operations
 - Drive resource utilization based on the principle of circular economy
- Social Strategic Direction: People's Well-Being, comprises three strategies:
 - o Promote safe working environment and respecting human right principles
 - o Co-create values and enhance society and community's quality of living
 - o Enhance employees' readiness to facilitate future business growth
- Governance Strategic Direction: Corporate Governance and Performance Excellence, comprises two strategies:
 - Operate with good governance and integrity
 - o Adapt readily to changes, accelerating business growth to drive the economy

Green Bond framework

PTT have developed Green Bond framework which PTT aims to issue Green Bonds to finance and refinance Reforestation Projects (including but not limited to the long-term forest conservation project and Environmental Learning Centers). PTT Green Bond framework has been reviewed with a Second Party Opinion and a verification by DNV GL. It also complies with ASEAN Green Bond Standards (ASEAN GBS) and Green Bond Principles 2018 by International Capital Market Association (ICMA). The annual green bond report is available on http://pttdebenture.azurewebsites.net/content.aspx?id=23.



Green Bond Detail

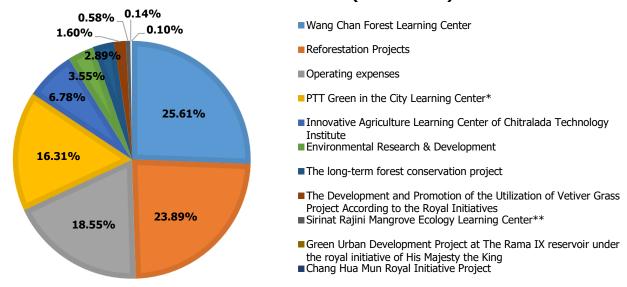
The green bond offered by PTT is shown in the table below. The Bond is the world's first bonds to be awarded Forest Conservation Project certification by Climate Bonds Initiative (CBI).

Issue Date	Maturity Date	ThaiBMA symbol	Currency	Coupon	Principal Amount (MB)
24 Jul 2020	24 Jul 2023	PTTC237A	THB	2.25%	2,000

Green Bond Portfolio and Total Expenditure

The 100% of the net proceeds from PTT's Green Bond was spent exclusively to finance and re-finance eligible green projects during year 2014-2020.

TOTAL EXPENDITURE (2014-2020)



^{*} refer to Metro Forest Learning Center on Sukhaphiban 2 Road, Bangkok in Green Bond Framework

Environmental Performance (Data as of 31 December 2021)

Partaking in the Increasing and Maintaining the Green Area in Khung Bang Kachao

PTT, the Chaipattana Foundation, network members, inclusive of the private sector, government sector, people's sector, and educational institutions, jointly revitalized the Khung Bang Kachao green area unceasingly. In this regard, OUR Khung BangKachao project by The Chaipattana Foundation and the Royal Forest Department signed a memorandum of understanding for collaboration in the development and restoration of royal green areas under

the supervision of the Royal Forest Department Maha Nakhon Central Park Project, Phra Pradaeng district, Samut Prakan province. Besides, the Royal Forest Department and PTT also signed memorandum of cooperation on green space learning restoration and management projects, Chaloem Phrakiat Park, His Majesty the King's 80th Birthday Anniversary, Song Khanong subdistrict, Phra Pradaeng district, Samut Prakan province, to develop learning a center. In 2021, PTT carried out with such



^{**} refer to Sirinart Rajini Ecosystem Learning Center in Green Bond Framework



cooperation in developing and managing the learning projects of the Chaloem Phrakiat Park uninterruptedly. As a supporter of the green area operation of the OUR Khung BangKachao project, it has restored 1,200 Rai of royal property green space in the area.



In 2021, 1,200 Rai of green areas were stored

Benefits to PTT

In 2021, 149.8 tonnes of CO₂ equivalent per annum (Carbon Credit) that can be stored (direct and indirect). Good relations form supporting the conservation and restoration of environment with the public and private sectors as well as the people.

Three PTT Nature Learning Centers

Operates through the PTT Reforestation and Ecology Institute, which was established to build on the Reforestation Campaign in Commemoration of the Royal Golden Jubilee Project's original mission of one million Rai of permanent forest planting since 1994 by conserving, restoring forests and creating a body of knowledge and distribute the experience of afforestation to the public as well as to create awareness of conservation of natural resources and the environment through the three nature learning centers:



1. Metro Forest Learning Center, Bangkok.

In 2021, received the Thailand Tourism Gold Awards in Tourist Destination for Learning from Tourism Authority of Thailand.

2. Sirinart Rajini Mangrove Ecosystem Learning Center, Prachuap Khiri Khan.

In 2021, received the Thailand Tourism Gold Awards in Tourist Destination for Learning from Tourism Authority of Thailand.

3. Wangchan Forest Learning Center, Rayong.

In 2021, received the Thailand Tourism Gold Awards in Nature Tourist Destination from Tourism Authority of Thailand.



1,981 visitors for three PTT Nature Learning Centers.

Benefits to PTT

The amount of greenhouse gases that were contained (directly and indirectly) is equivalent to 62,496.12 tonnes of ${\rm CO_2}$ equivalent per annum (carbon credits) and good relations in promoting environmental conservation and restoration.