



XAYABURI POWER

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XAYABURI POWER COMPANY LIMITED

GREEN BONDS ALLOCATION AND IMPACT REPORT

JUNE 2023

XPCL

XPCL GREEN BONDS ALLOCATION AND IMPACT REPORT | JUNE 2023

INTRODUCTION

Xayaburi Power Company Limited (“XPCL”) is a limited company incorporated on 22 June 2010 under the laws of the Lao People’s Democratic Republic (“Lao PDR”) with registered office at 215 Lane Xang Avenue, Ban Xieng Yuen, Muang Chantabouly, Vientiane, Lao PDR. It is the first large-scale project on the mainstream of the Mekong River within the Lao PDR and the lower Mekong basin. XPCL operates the Xayaburi Hydroelectric Power Plant (“XHPP”), a run-of-river power plant with total installed capacity of 1,285 MW and an average annual energy generation of approximately 7,400 GWh. XHPP commenced its commercial operation on 29 October 2019 with concession period of 31 years until 2050.



Xayaburi Hydroelectric Power Plant

XPCL GREEN BONDS FRAMEWORK

As part of the broader sustainability strategy, Xayaburi Power Company Limited (“XPCL”) has established Green Bond Framework (the “Framework”) in December 2021 in order to have a single robust methodology in place for all future Green Bonds issuance of XPCL.

The Framework⁽¹⁾ is aligned with the Green Bond Principles, issued by the International Capital Market Association in June 2021 and with the ASEAN Green Bond Standards, issued by ASEAN Capital Markets Forum in October 2018, which are a set of voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the sustainable finance market.

XPCL has engaged DNV, an independent expert in assurance and risk management, to provide an independent Second Party Opinion on the Framework.⁽²⁾

This XPCL Green Bonds Allocation and Impact Report is published in order to provide Allocation Reporting and Impact Reporting within 12 months after the Green Bonds issuance in accordance with the Framework.

(1) <https://www.ckpower.co.th/storage/content/business/hydro-power/download/20220225-ckp-hydro-power-green-bond-framework-02.pdf>

(2) <https://www.ckpower.co.th/storage/content/business/hydro-power/download/20220225-ckp-hydro-power-green-financing-instruments.pdf>

ALLOCATION REPORTING

GREEN BONDS PORTFOLIO

As at 30 June 2023, XPCL’s portfolio of green bonds issued under the Framework (the “Green Bonds”) comprises three Green Bonds as follows:

ThaiBMA Symbol	ISIN	Issue Date	Maturity Date	Term	Coupon (% p.a.)	TRIS Issue Rating	Issue Size (THB mn)
XPCL257A	THA908035704	27-Jul-2022	27-Jul-2025	3 years	Fixed 4.50%	BBB+	4,031
XPCL267A	THA908036702	27-Jul-2022	27-Jul-2026	4 years	Fixed 4.75%	BBB+	1,258
XPCL277A	THA908037700	27-Jul-2022	27-Jul-2027	5 years	Fixed 5.00%	BBB+	3,106
Total							8,395

ELIGIBLE GREEN PROJECT

The net proceeds from XPCL’s Green Bonds will be used to finance or refinance the eligible green project as detailed below:

Project Name	Total Investment	Eligible Green Category	Criteria
Xayaburi Hydroelectric Power Plant (“XHPP”)	THB 134,235 mn	Renewable Energy (Hydropower)	Hydropower facility in operation before 2020 with power density higher than 5W/m ² and GHG emissions intensity lower than 100gCO ₂ e/kWh

PROCEEDS ALLOCATION

XPCL has fully allocated the proceeds from issued Green Bonds to refinance the investment in Xayaburi Hydroelectric Power Plant as follows:

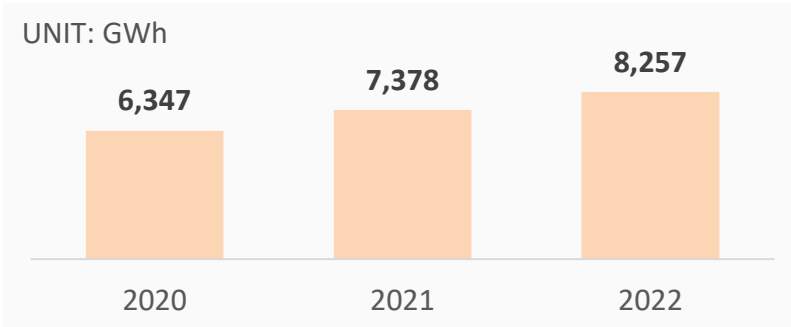
Project Name	Green Bonds	Issue Date	Allocation Date	Allocation Amount (THB mn)	% Allocated to Refinancing	Look-back Period for Refinance
XHPP	XPCL257A	27-Jul-2022	1-Aug-2022	4,031	100%	2012 - 2019
	XPCL267A	27-Jul-2022	1-Aug-2022	1,258	100%	2012 - 2019
	XPCL277A	27-Jul-2022	1-Aug-2022	3,106	100%	2012 - 2019
				8,395		

Remark: gCO₂e/kWh = grams of carbon dioxide equivalent per kilowatt-hour

IMPACT REPORTING

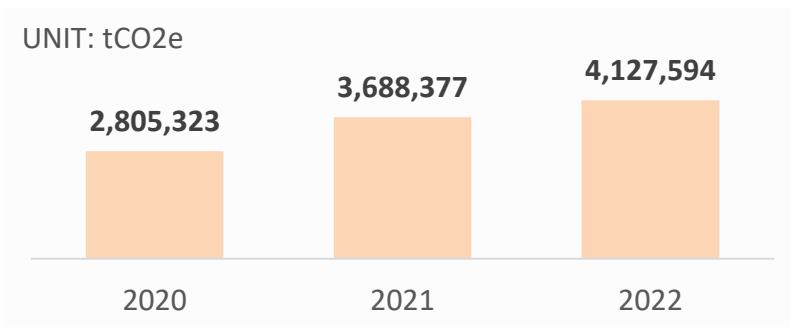
The followings are key impact indicators of XHPP, the eligible project.

XHPP: ANNUAL RENEWABLE ENERGY GENERATION



The Annual Renewable Energy Generation is measured at generating point and represents the gross electricity generated by XHPP before deduction of transmission losses and internal consumption.

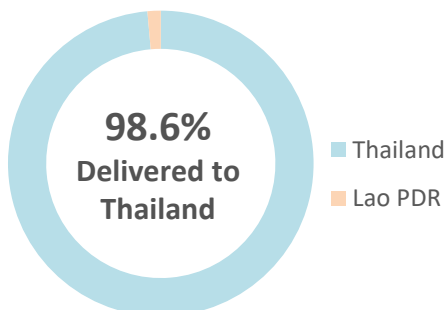
XHPP: ANNUAL GHG EMISSIONS AVOIDED



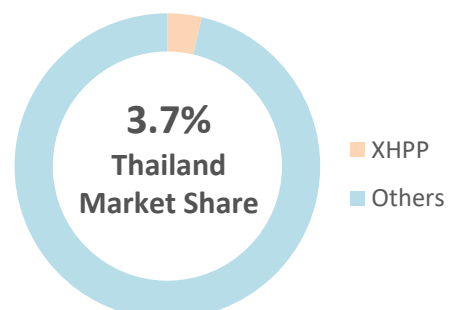
The Annual GHG Emissions Avoided is calculated using the Emission Factor of Thailand's national electricity grid mix of 0.4999 kgCO₂e/kWh⁽¹⁾ as disclosed by Thailand Greenhouse Gas Management Organization.

In 2022, XHPP delivered 8,124 GWh⁽²⁾ of net electricity at delivery points to its customers. 98.6% of the net electricity was delivered to Thailand and the remaining 1.4% to Lao PDR. The electricity delivered to Thailand by XHPP was approximately 3.7% of Thailand's total electricity generation⁽³⁾ in 2022.

Electricity Delivered by Geography



Thailand's Generation Market Share 2022



(1) http://thaicarbonlabel.tgo.or.th/admin/uploadfiles/emission/ts_578cd2cb78.pdf; Reference: Thai National Life Cycle Inventory Database, TIISMTEC-NSTDA, AR5 (with TGO electricity 2016-2018) as of April 2022

(2) Including SE Account

(3) Source: Energy Policy and Planning Office (EPPO)

Remark: tCO₂e = tonnes of carbon dioxide equivalent; kgCO₂e/kWh = kilograms of carbon dioxide equivalent per kilowatt-hour