



IRPC GREEN ANNUAL REPORT 2023

TO SHAPE MATERIAL AND ENERGY SOLUTION IN HARMONY WITH LIFE

DATA AS OF 31 DECEMBER 2023

2023 Green Debenture Report:

About the company

IRPC Public Company Limited (“IRPC”, “Company” or “Issuer”), a subsidiary of PTT Group, is a Southeast Asia’s integrated petrochemical pioneer. The Company began producing applications of petroleum and petrochemical products in the early 1980s, before venturing out its business line to include a fully integrated petrochemical complex. Today, IRPC’s main operations are located within the IRPC Industrial Park in Rayong, Thailand which features the infrastructure needed for its business, including a deep-sea port, an oil depot, and a power plant. The Company’s mission is “to deliver with innovations the better attributes and solutions of sustainable material and energy for the future”.

IRPC is committed to conducting its business with fairness, legality, and good corporate governance, coupled with social and environmental supports, to create balance in all aspects and live together sustainably.

Reference Principles

This Green Financing Framework has been designed accordingly with the following guidelines:

- The Green Bond Principles (“GBP”) ¹, issued by the International Capital Market Association (ICMA) in June 2021
- The ASEAN Green Bond Standards (“GBS”) ², issued by the ASEAN Capital Markets Forum (ACMF) in October 2018
- The Green Loan Principles (“GLP”) ³, issued by the Loan Market Association (LMA) in May 2020


Note:¹ In alignment with ICMA Green Bond Principles, June 2021, <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>

² In alignment with ASEAN Green Bond Standards, October 2018, <https://www.theacmf.org/initiatives/sustainable-finance/asean-green-bond-standards>

³ In alignment with LMA Green Loan Principles, May 2020, <https://www.lsta.org/content/green-loan-principles/>

USE OF PROCEEDS

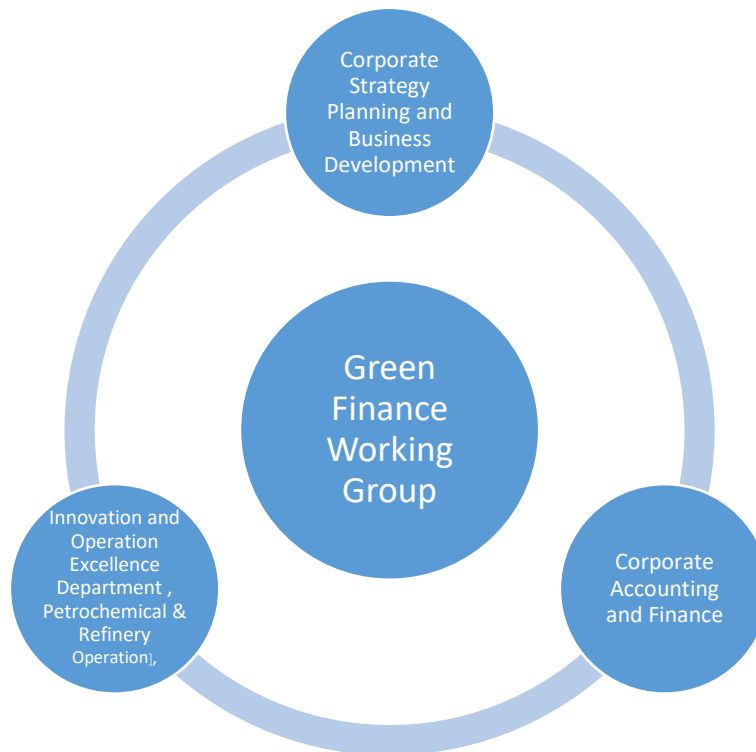
IRPC intends to allocate an amount of at least equivalent to its net proceeds from the upcoming green financing instrument under this Framework. The net proceeds will be exclusively used for the financing and/or refinancing of Eligible Green Project(s), with initial investment up to 40 months prior to the issuance date of the instrument

Category (GBP)	Criteria	Eligible Green Project	Exclusion
Renewable Energy 	Expenditures to support the development, installation, operation, maintenance, and connection of renewable energy, including onshore/offshore solar power i.e. floating solar	Floating Solar	Hydropower over 25MW is excluded

PROCESS FOR PROJECT EVALUATION AND SELECTION

STEP1: Evaluation by Green Finance Working Group

STEP2: Approval by Management Committee



Responsibility of Green Finance Working Group

- Review and validate the existing of Eligible Green Project(s)
- Monitor the allocation of proceeds in order to ensure maximum efficiency and optimal result of the proceeds, as well as to facilitate the ongoing reporting
- Decide to replace Eligible Green Project(s) if it no longer meets the eligibility criteria
- Oversee any ESG controversy (such as controversies that may impact local communities or changes in ecosystems) and consider to replace with new Eligible Green Project(s)
- Manage any future update of the Green Financing Framework

Management of Proceeds

- Earmarking of Allocated Proceeds
- The net proceeds will be deposited in a general account with the amount being put aside and marked for allocation to the Eligible Green Project(s) in accordance to this Framework
- Portfolio Approach
- IRPC shall maintain its funding towards such project to be at least equal to or exceed the net proceeds received under this framework
- Substitution of Projects
- In the event that the above project fails to maintain its quality in accordance with the eligibility criteria, IRPC will replace such project with the alternative projects as soon as it/they are identified and approved.
- Allocated Process Tracking
- IRPC will track the use of net proceeds of instruments issued under this Framework via its internal information system. The balance of the tracked proceeds should be adjusted on an annual basis, in order to match the allocation to Eligible Green Projects re/financed during this period.
- Unallocated Process Treatment
- The remaining (unallocated) amount issued under this Framework, IRPC may hold the proceeds in form of either cash or investments in short-term liquid instruments which is in-line with its policy and shall aim to allocate the amount to eligible green projects within 2 years of issue date.

REPORTING

- GREEN FINANCE REPORT is available on IRPC's Website under Green debenture section.

Allocation Report (Reporting Frequency: Annually until full allocation)

Until the total net proceeds from the instrument has been fully allocated, the [Green Finance Working Group] will prepare and make available a report on the allocation progress. This report is designed to include the following but not limited to:

- The net proceeds figure along with amount or portion (%) of allocated funds towards the Eligible Green Project(s)
- The amount or portion (%) used in financing as well as refinancing
- The balance or the portion (%) of net proceeds that is yet to be allocated

Impact Reporting (Reporting Frequency: Annually)

IRPC aims to communicate its impact of the above Green Eligible Projects on the environment on an annual basis. Although this is subjected to the availability of data as well as methodologies that will be available publically. The report will also incorporate information on the methodology and assumption used for calculation of results shown for the below impact indicators.

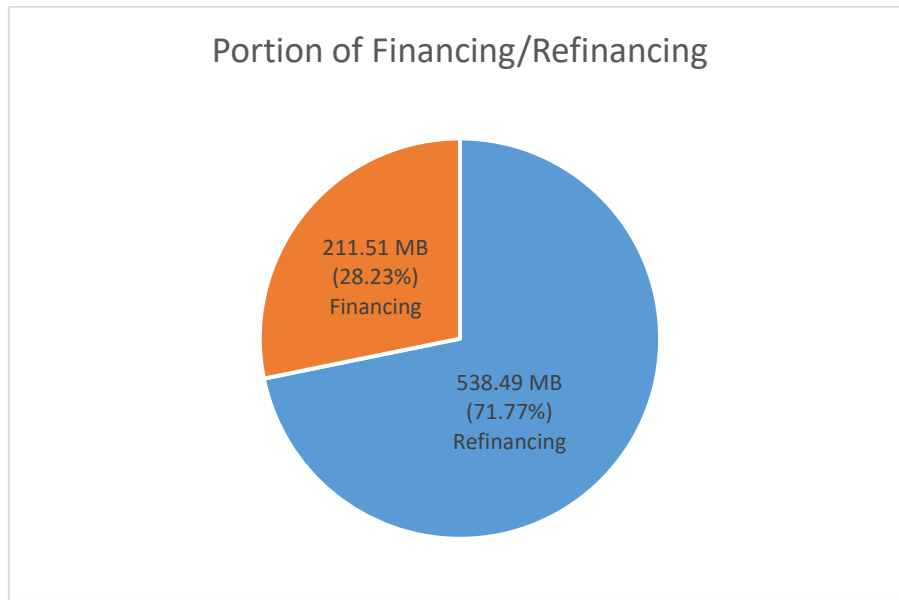
IRPC DEBENTURE PORTFOLIO

IRPC issued the first THB 750 million Green Debentures on May 20th, 2022. The proceeds from the debentures, which were offered to institutional and high-net-worth investors, will be used to support the company's renewable energy projects **in floating solar project** under the company green financing framework. This solar farm contributes to the power stability in IRPC Industrial Park and is considered an innovation that not only increases business opportunities but also acts as an eco-friendly alternative. The company places the utmost importance on conducting business while aiming for sustainable growth.

Symbol	Issue Date	Maturity Date	Tenor (years)	Issue size (THB MM)	% Coupon (p.a.)
IRPC295A	20/05/2022	20/05/2029	7	750	4.17

IRPC ELIGIBLE GREEN PROJECT ALLOCATION

IRPC has fully allocated Green Debentures for financing or refinancing, in whole or in part, new and/or existing eligible projects of IRPC and its affiliates as of December 31st, 2023.



FLOATING SOLAR POWER



TYPE	Capacity	Location	Energy production
Floating Solar Projects: Phase 1	12.5 MW	Rayong	19,415 Mwh/Yr (12%)
Floating Solar Projects: Phase 2 (Ready for Commercial Operation Date)	8.5 MW	Rayong	12,837 Mwh/Yr (12%)

EXPENDITURE

TYPE	Investment Financing (Million Baht)
Floating Solar Projects: Phase 1	538.49
Floating Solar Project: Phase 2	211.51
Total	750.0

IRPC GREEN PROJECT IMPACT

IRPC has summarized the impact of the green debenture portfolio by category from environmental perspective as of December 31st, 2023.

Eligible Green Projects	Floating Solar
Impact indicators	Phase1: <ul style="list-style-type: none"> ● Reduce 8.7% from conventional power plant.

<ul style="list-style-type: none"> ● % Annual reduction in energy consumption from conventional power plant ● Annual reduction in GHG emission (unit: tonnes of CO2 equivalent) ● Annual renewable energy generation or installed capacity (unit: Mwh) 	<ul style="list-style-type: none"> ● 9,459 tonnes of CO2 equivalent ● 12.5 Mwh
<p><u>Impact indicators</u></p> <ul style="list-style-type: none"> ● % Annual reduction in energy consumption from conventional power plant ● Annual reduction in GHG emission (unit: tonnes of CO2 equivalent) ● Annual renewable energy generation or installed capacity (unit: Mwh) 	<p>Phase 2:</p> <ul style="list-style-type: none"> ● Reduce 5.8% from conventional power plant. ● 6,254 tonnes of CO2 equivalent ● 8.5 Mwh

Remark: calculation method

The method for calculation is derived from Thailand Greenhouse Gas Management Organization:

<https://ghgreduction.tgo.or.th/th/download-tver/120-tver-gwp-emission-factor/353-2564.html> (ค่าการปล่อยก๊าซเรือนกระจก (Emission Factor) จากระบบสายส่ง และจากการผลิตความร้อนสำหรับโครงการและกิจกรรมลดก๊าซเรือนกระจก)