



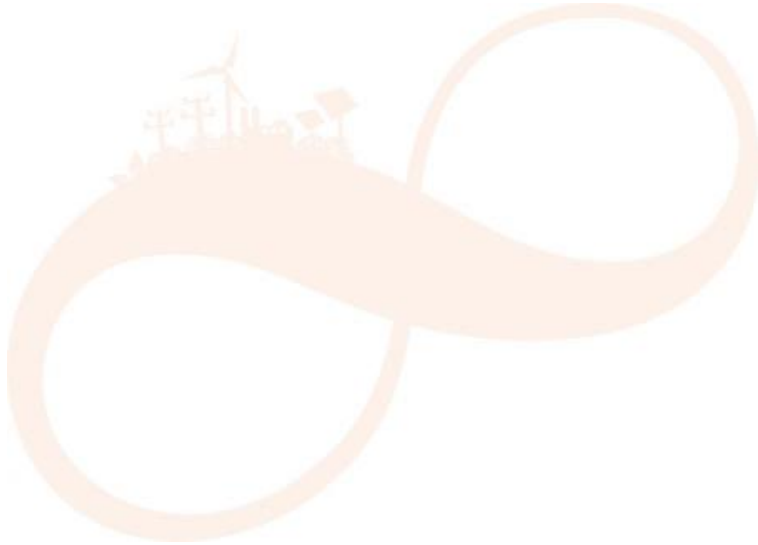
**CKPower**  
ENDLESS ENERGY

# RENEWABLE ENERGY

FOR A SUSTAINABLE FUTURE

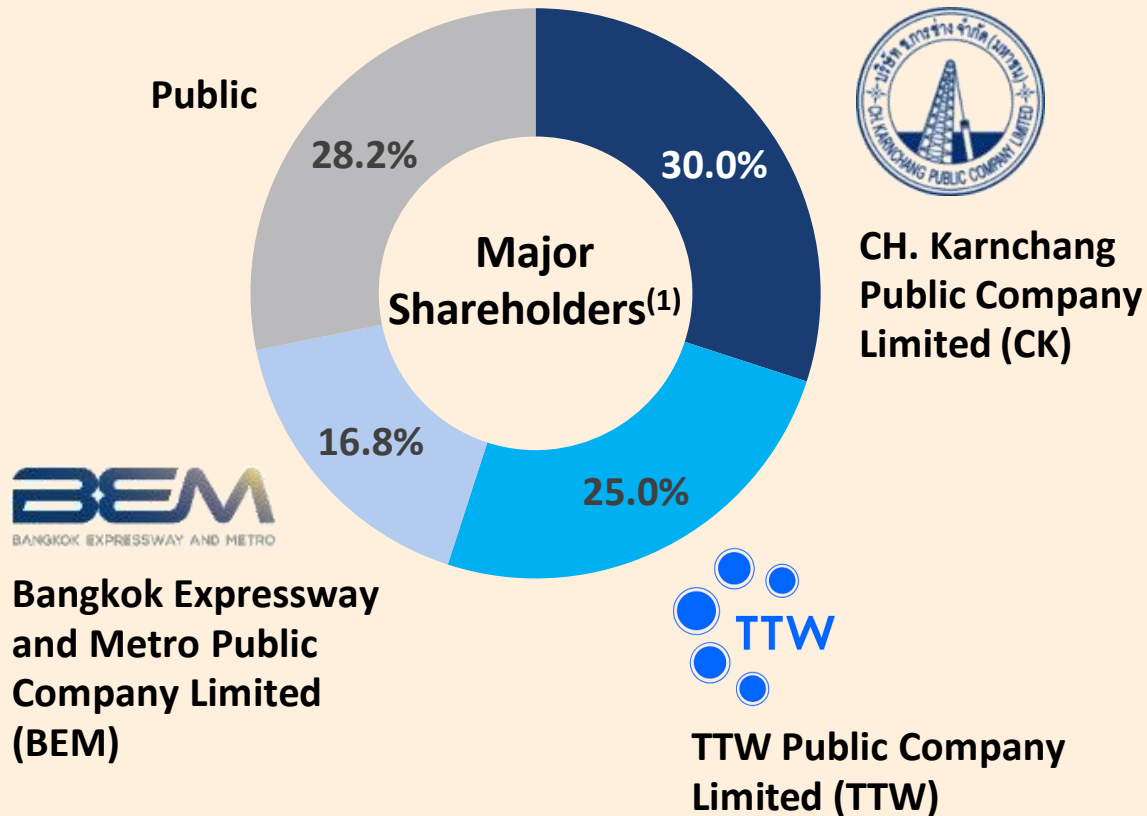
SET OPPORTUNITY DAY – Q2 2022

5 September 2022




- 1. Corporate Overview**
- 2. Growth & Sustainability Strategy**
- 3. 1H 2022 Consolidated Performance**

## The Power Investment Arm of CH. Karnchang Group



## General Information

<b>Symbol</b>	:	CKP
<b>Established Date</b>	:	8 June 2011
<b>Listed Date</b>	:	18 July 2013
<b>Paid-up Shares</b>	:	8,129,382,729 shares
<b>Par</b>	:	Bt 1.00 per share
<b>Registered Capital</b>	:	Bt 8,129 mn
<b>Market Cap</b>	:	Bt 41,866 mn <sup>(2)</sup>
<b>Indices</b>	:	SET 100 SET THSI SET CLMV
<b>Sector</b>	:	Energy
<b>TRIS Rating</b>	:	A / Stable
<b>CG Score</b>	:	
<b>Latest Dividend Payout</b>	:	Bt 650 mn (75% Payout Ratio)

(1) As of 30 June 2022, (2) As of 30 August 2022

## Hydro



### 1. Nam Ngum 2

Subsidiary

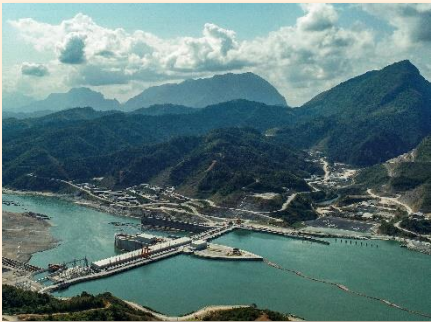


**COD:** Jan 2013  
**Ownership:** 46.0%  
**Capacity MW:** 615  
**Equity MW:** 283



### 2. Xayaburi

Associate



**COD:** Oct 2019  
**Ownership:** 42.5%  
**Capacity MW:** 1,285  
**Equity MW:** 546

## Cogeneration



### 3. Bangpa-In Cogeneration

Subsidiary



	BIC1	BIC2
<b>COD:</b>	Jun 2013	Jun 2017
<b>Ownership:</b>	65.0%	65.0%
<b>Capacity MW:</b>	118	120
<b>Equity MW:</b>	77	78

**Total Installed MW Capacity: 2,167 MW**

**Total Equity MW Capacity: 1,003 MW**

## Solar



### Bangkhenchai

Subsidiary

**Ownership:** 100.0%



#### Total Capacity 15 MW

	Since
4. Bangkhenchai (8.00)	Aug 2012
5. Phachi (0.89)	Feb 2019
6. Banglen (0.97)	May 2019
7. Phutthamonthon Sai 5 (0.97)	Jun 2019
8. Mahachai (0.72)	Jun 2019
9. Krathum Ban (0.51)	Jul 2019
10. Khlong Preng (2.67)	Sep 2020

### 11. Nakhon Ratchasima Solar

Associate

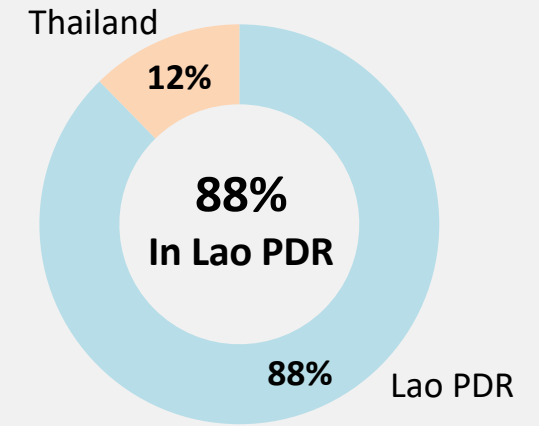
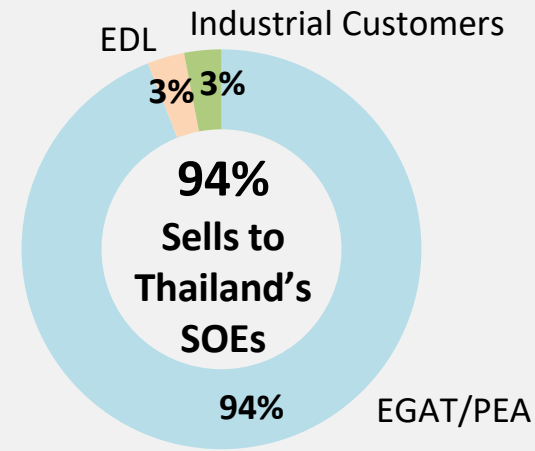
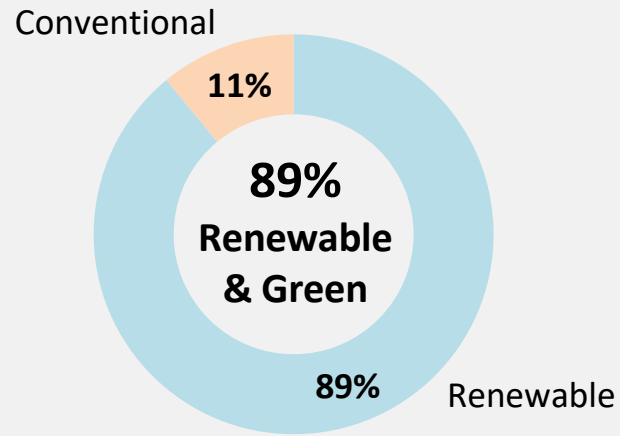
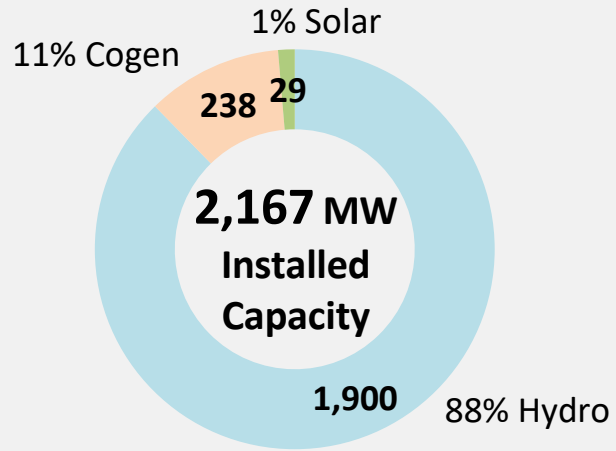
**COD:** Mar 2012  
**Ownership:** 30.0%  
**Capacity MW:** 6  
**Equity MW:** 2

### 12. Chiangrai Solar

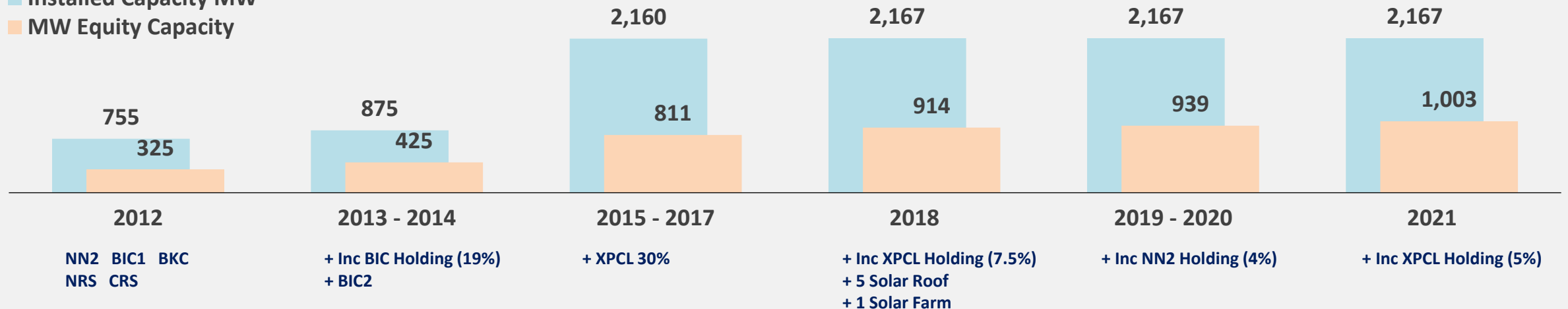
Associate

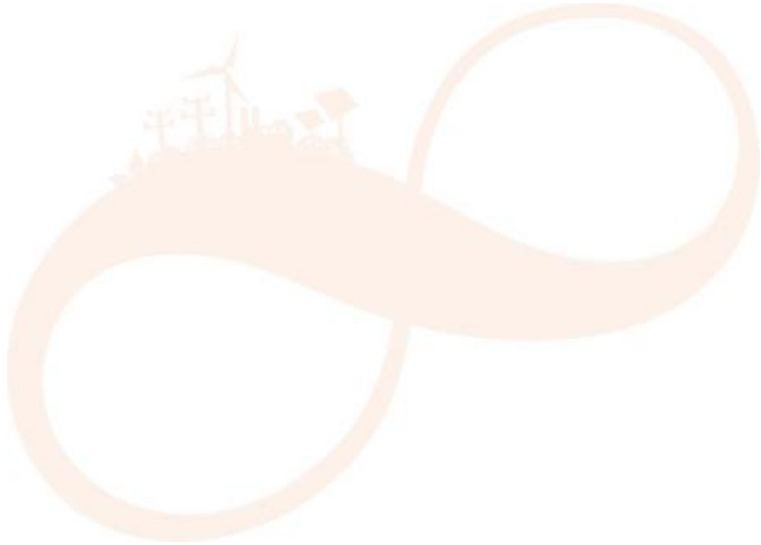
**COD:** Jan 2013  
**Ownership:** 30.0%  
**Capacity MW:** 8  
**Equity MW:** 2

## Installed Capacity



■ Installed Capacity MW  
■ MW Equity Capacity





1. Corporate Overview
2. Growth & Sustainability Strategy
3. 1H 2022 Consolidated Performance

# CKP Long-term Corporate Strategy

TO BE ONE OF THE REGION'S **LARGEST PRODUCERS**  
OF ELECTRICITY FROM **RENEWABLES** WITH ONE OF THE **LOWEST CARBON FOOTPRINTS**



TO GENERATE AN OPTIMAL STABLE  
AND FAIR RETURN FOR SHAREHOLDERS



TO BE RESPONSIBLE TO THE ENVIRONMENT  
COMMUNITY AND ALL STAKEHOLDERS

## GROWTH

DOUBLE CAPACITY IN 3 YEARS

 **4,800 MW**  
Total by 2024

**95%**  
Renewable



Hydro



Wind



Solar



**ASEAN**  
Focused

## PROFITABILITY

OPERATIONAL EXCELLENCE



**Zero Downtime**  
Operation



**Regional Hydro**  
Forecasting & Shared  
Service Center



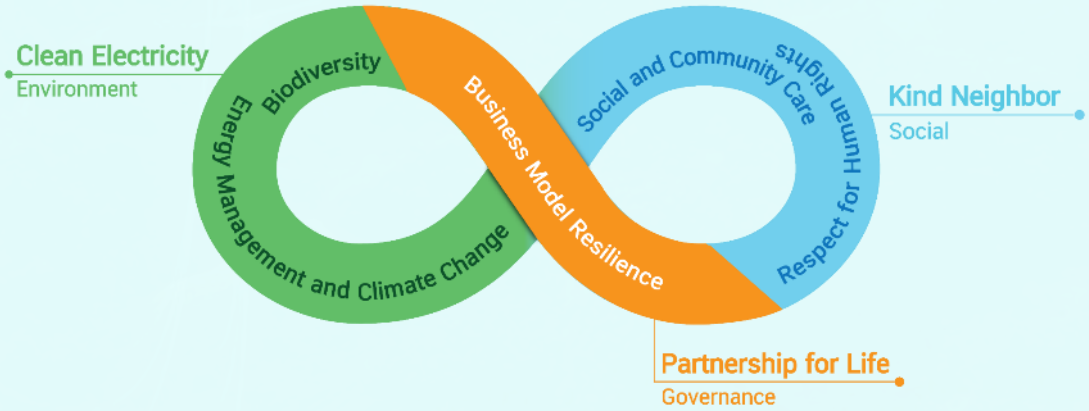
**One CKP**  
One Safety



**Green**  
Financing

## SUSTAINABILITY

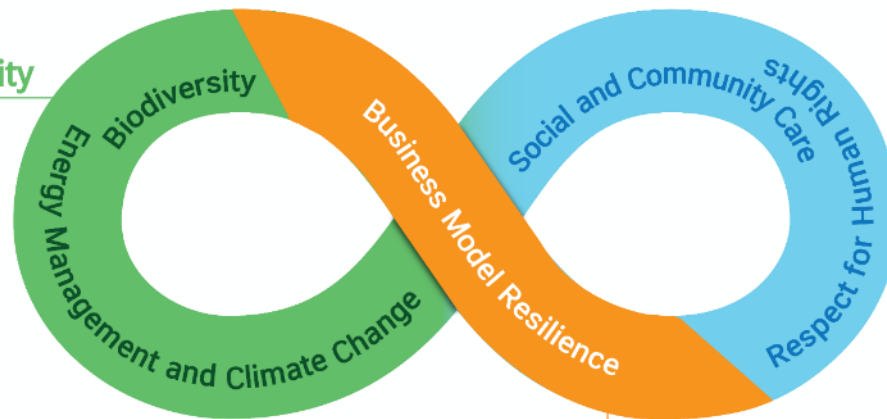
STRENGTHEN BUSINESS SUSTAINABILITY, CLIMATE CHANGE  
STRATEGY, CG AND RISK MANAGEMENT



**Clean Electricity**  
Environment

**Kind Neighbor**  
Social

**Partnership for Life**  
Governance



## Clean Electricity

### Energy management and Climate

- 100% Renewable Electricity Consumption within Organization Including REC<sup>(1)</sup> by 2043
- > 95% Renewable Energy Capacity by 2043
- Net Zero GHG Emission by 2050

### Biodiversity

- Develop Biodiversity Roadmap by 2023
- Assessment of Residual Impact at all operation sites by 2025
- Strive toward No Net Loss (NNL) of Biodiversity and Ecosystem Services by 2040



## Kind Neighbor

### Respect for Human Rights

- Develop the Human Rights Roadmap for our business by 2022
- Raising Awareness for Human Rights cover 100% for Employee by 2022
- 100% Assessed Human Right Risk and Impact Assessment throughout our Value Chain
- Zero Cases of Human Rights Violation

### Social and Community Care

- Zero unresolved Complaints
- Develop CSR Strategy/Corporate Citizenship Strategy by 2022
- Creating Value for Society and Ecosystem with Renewable Electricity by 2026



## Partnership For Life

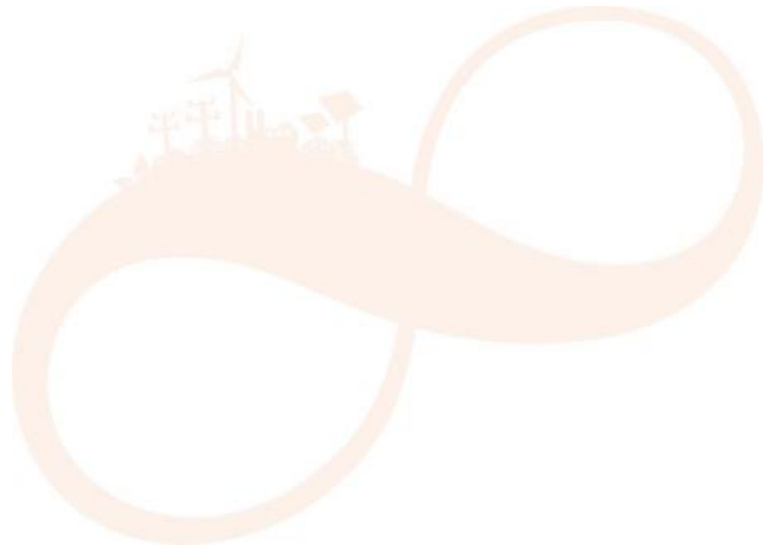
### Business Model Resilience

- Diversify Renewable type
- Explore New Customers & Geographies within ASEAN
- Integrate Digital Transformation & other Innovations



(1) Renewable Energy Certificate





- 1. Corporate Overview & Long-term Growth**
- 2. Sustainability Strategy**
- 3. 1H 2022 Consolidated Performance**

## Luang Prabang Hydroelectric Power Project

### Execution of Tariff MOU

Date	:	27 April 2022
Avg. Tariff	:	2.4030 Bt/kWh
MW Capacity	:	1,460 MW
SCOD	:	1 January 2030
Progress	:	Under financing negotiation

## XPCL's Green Debentures No. 1/2022 Issuance

Date	:	27 July 2022
Issue Rating	:	BBB+ / Stable
Initial Issue Size	:	Bt 5,000 mn
Over Allotment	:	Bt 3,395 mn
Use of Proceeds	:	Repay Existing Loans for Interest Cost Savings



Green Debenture	Rate	Tenor	Maturity	Bt mn
Tranche 1	4.50%	3 years	July 2025	4,031
Tranche 2	4.75%	4 years	July 2026	1,258
Tranche 3	5.00%	5 years	July 2027	3,106
<b>Total</b>	<b>Avg. 4.72%</b>			<b>8,395</b>

## Awards and Recognition



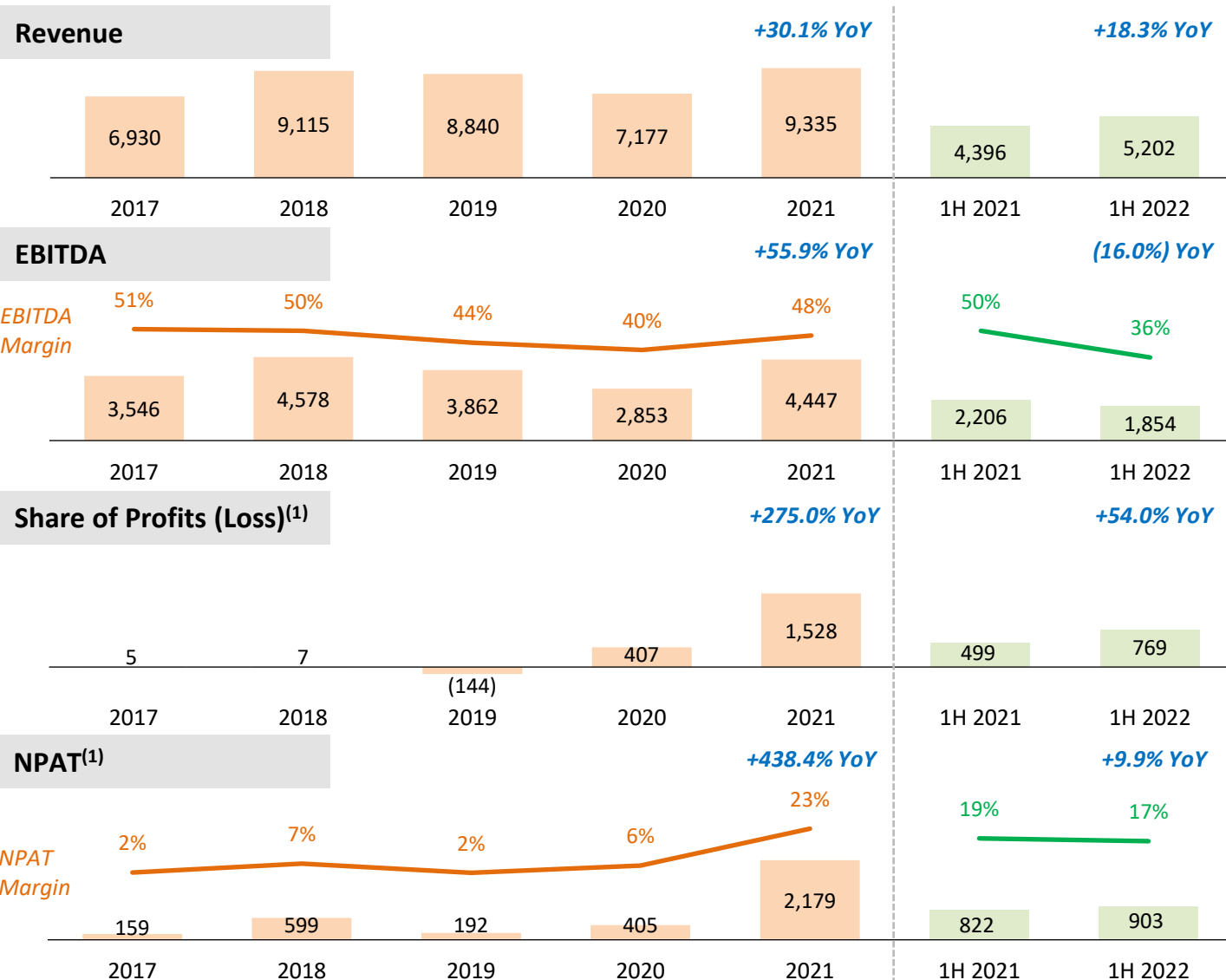
By Thaipat Institute



# CKPower 1H 2022 Consolidated Performance

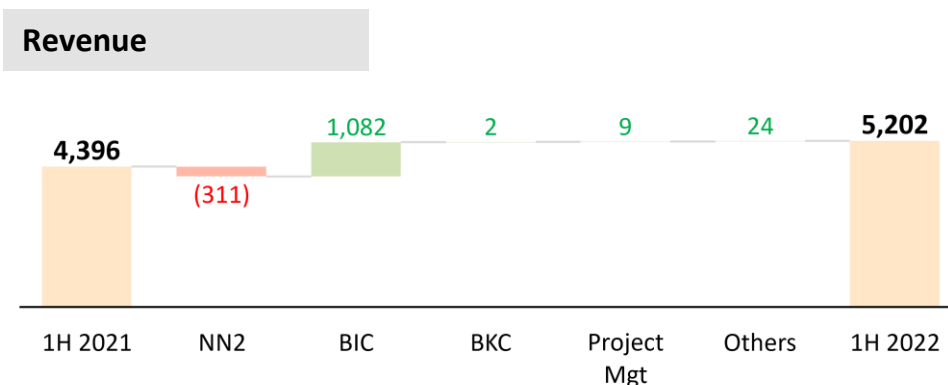
## Consolidated Financial Performance

Unit: Bt mn



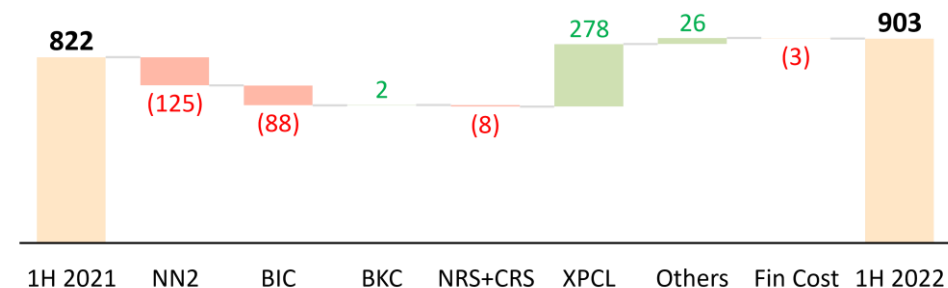
## Performance Highlights

Unit: Bt mn



- Increase in Revenue from Electricity and Steam Sales of BIC driven by higher natural gas price and Project Management Income from XPCL;
- Partially offset by lower Revenue from Electricity Sales of NN2.

## NPAT



- Consolidated NPAT increased YoY mainly driven by higher share of profit from XPCL;
- Partially offset by lower sales volume of NN2 and higher fuel costs of BIC.

(1) Excluded non-recurring items; (2) Effective Tax Rates of 1H 2021 and 1H 2022 were 2% and 3%, respectively. The low tax rates were mainly due to the tax rate of NN2 according to the Concession Agreement and BOI tax benefits of BIC and BKC.

# CKPower 1H 2022 Consolidated Income Statement

Description	Year (Bt mn)		Changes	
	1H 2021	1H 2022	Inc/(Dec)	%
Revenue from Sales of Electricity and Steam	4,020.0	4,792.8	772.8	19.2
Project Management Income	145.1	154.0	8.9	6.1
Interest Income	228.6	251.7	23.1	10.1
Other Income	2.5	3.6	1.1	44.0
<b>Total Revenues</b>	<b>4,396.2</b>	<b>5,202.1</b>	<b>805.9</b>	<b>18.3</b>
Operating Expenses	(3,245.5)	(4,404.6)	1,159.1	35.7
Share of Profit from Investments in Jointly Controlled Entities and Associates	499.5	769.0	269.5	54.0
Foreign Exchange Gain	17.9	15.9	(2.0)	(11.2)
<b>Earnings Before Interest and Tax</b>	<b>1,668.1</b>	<b>1,582.4</b>	<b>(85.7)</b>	<b>(5.1)</b>
Finance Cost	(529.3)	(532.4)	3.1	0.6
Income Tax Expenses	(23.9)	(26.6)	2.7	11.3
Non-controlling Interests of the Subsidiaries	(293.3)	(120.6)	(172.7)	(58.9)
<b>Net Profit attributable to Equity Holders of the Company</b>	<b>821.6</b>	<b>902.8</b>	<b>81.2</b>	<b>9.9</b>

## Consolidated Subsidiaries

NN2	Nam Ngum 2 Power
BIC	Bangpa-in Cogeneration
BKC	Bangkhenchai

## Associate/Jointly Controlled

XPCL	Xayaburi Power
NRS	Nakhon Ratchasima Solar
CRS	Chiangrai Solar

# NN2 1H 2022 Performance

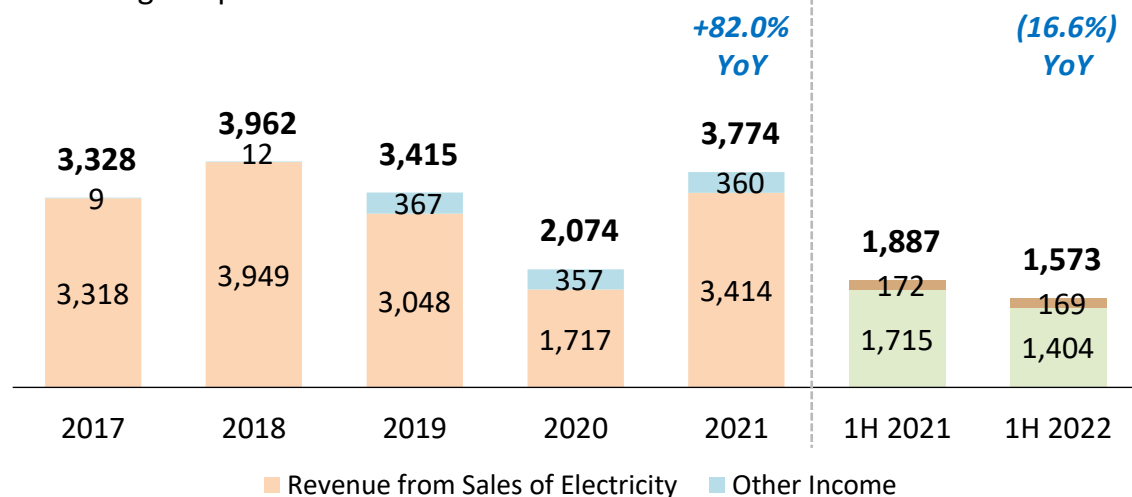
Consolidated  
Subsidiary



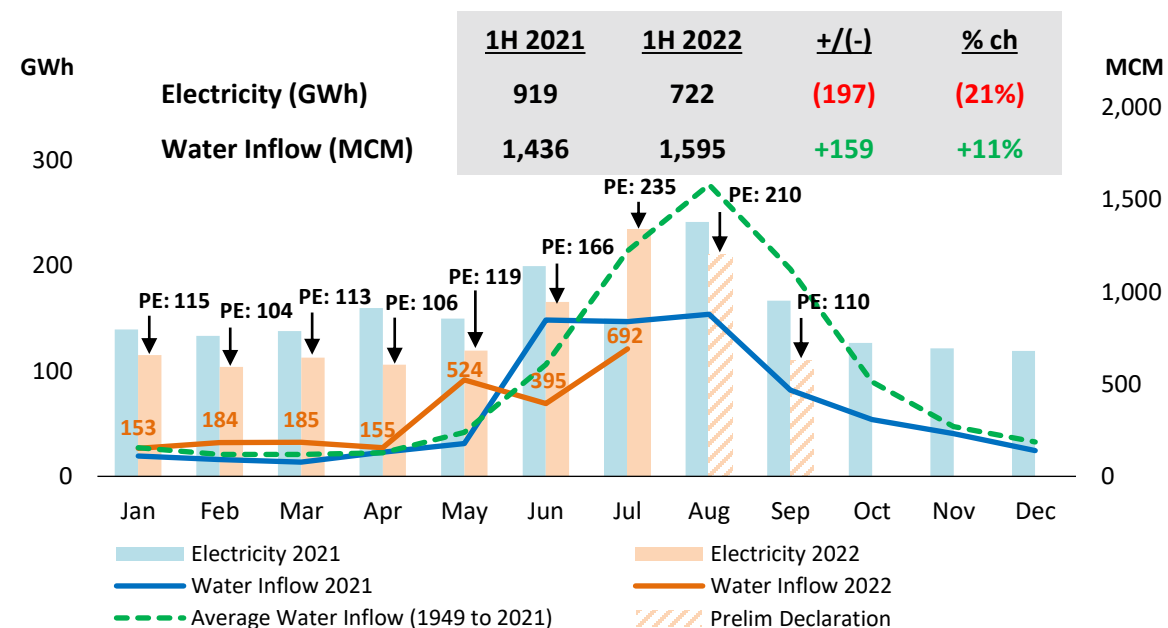
## Total Revenue<sup>(1)</sup>

Unit: Bt mn

Total Revenue in 1H 2022 decreased YoY, mainly due to lower water level in the reservoir at the beginning of the year, resulted in the conservative declaration of NN2 during the period.



## Monthly Electricity Sales and Water Inflow



## Tariff Structure

PE Tariff			SE Tariff	EE Tariff
US\$ per kWh	Bt per kWh	Total Bt equiv. <sup>(2)</sup> per kWh	Bt per kWh	Bt per kWh
0.0267	1.041	1.948	1.353	1.145

## Electricity Sales Volume

Sales Volume (GWh)	2017	2018	2019	2020	2021	1H 2021	1H 2022
PE	1,829	1,980	1,675	916	1,742	919	722
SE	25	130	4	-	99	-	-
EE	-	344	-	-	-	-	-
TE	4	1	6	4	4	-	-
Account-PE	-	-	-	-	-	-	-
Account-SE	-	-	-	-	-	-	-
<b>Total</b>	<b>1,857</b>	<b>2,455</b>	<b>1,685</b>	<b>920</b>	<b>1,845</b>	<b>919</b>	<b>722</b>

(1) SEAN's Consolidated Financial Statements; (2) Based on exchange rate of 1 US\$ = 34 Baht

# XPCL 1H 2022 Performance

Share of Profit

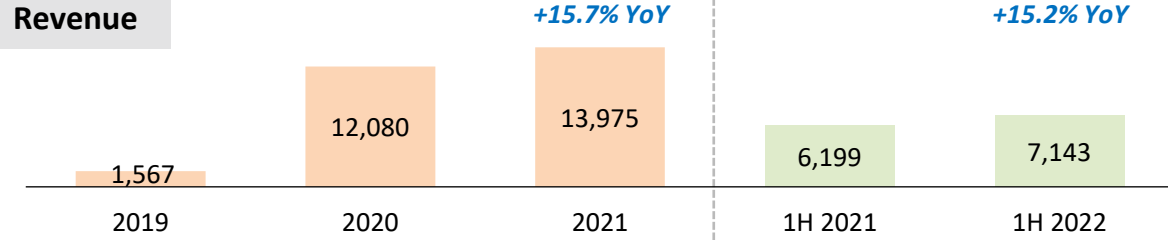


## Financial Performance

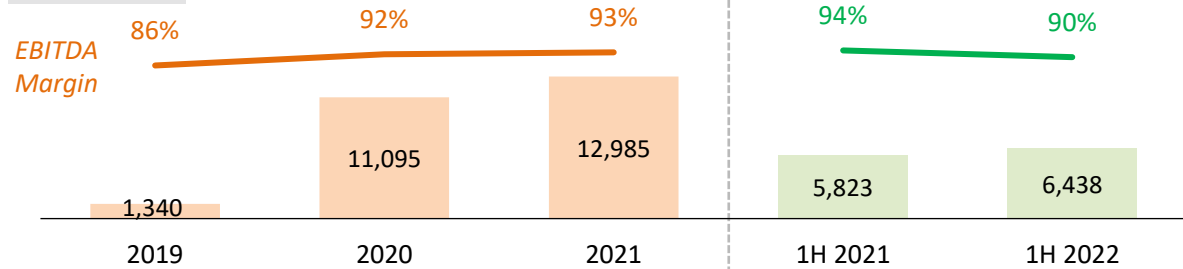
Unit: Bt mn

The improvement of 1H 2022 performance YoY was mainly driven by an increase in sales volume following the higher average water flow compared to the same period last year.

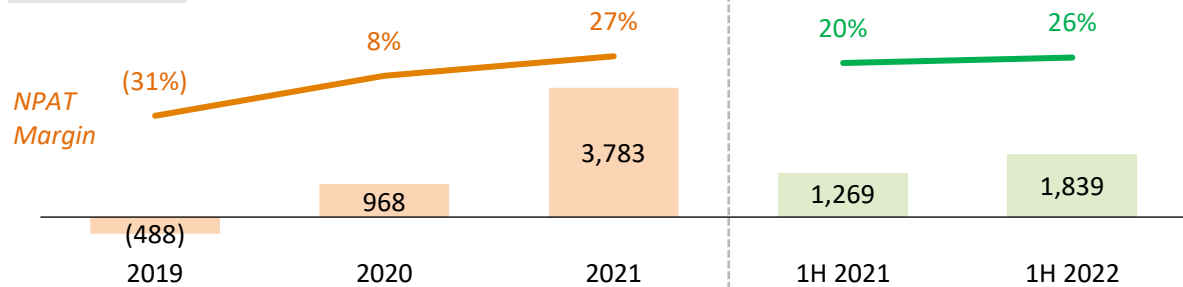
### Revenue



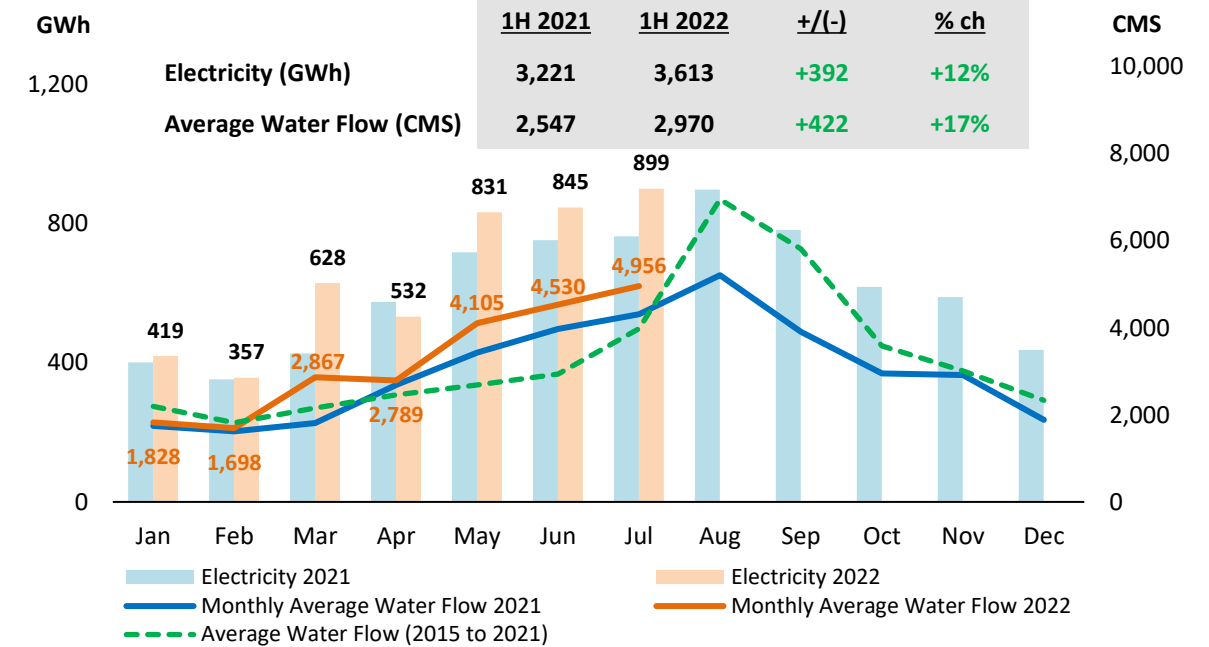
### EBITDA<sup>(1)</sup>



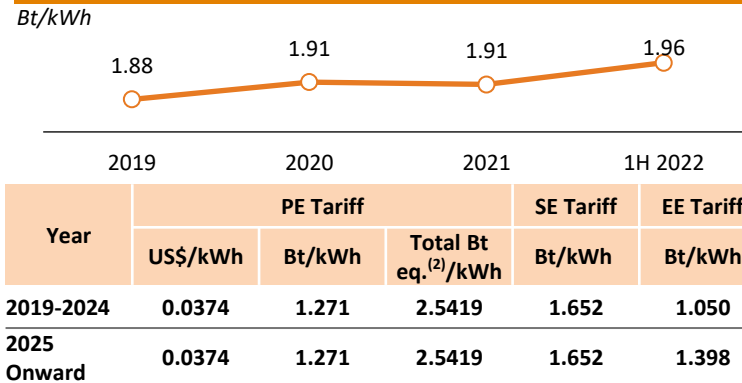
### NPAT<sup>(1)</sup>



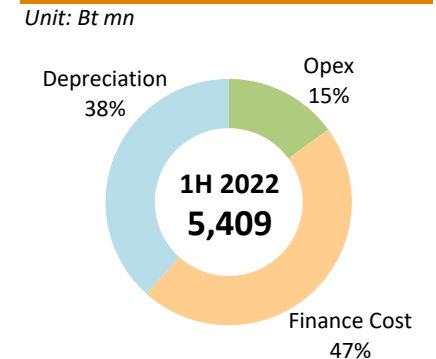
## Monthly Electricity Sales and Average Water Flow



## Average Tariff & Structure



## Cost Structure



(1) Excluded non-recurring items; (2) Long-term exchange rate assumption is 1 US\$ = 34 Baht

# BIC 1H 2022 Performance

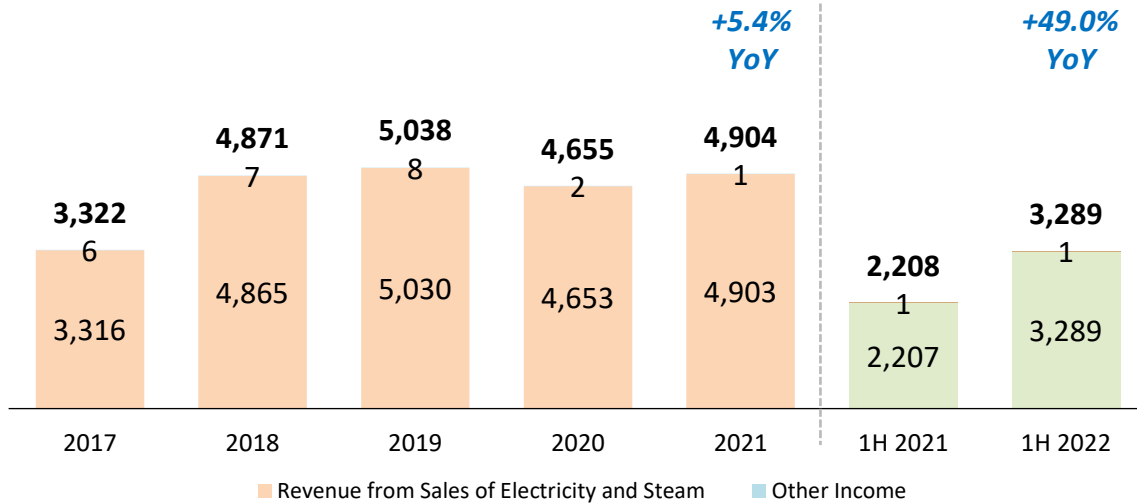
Consolidated  
Subsidiary



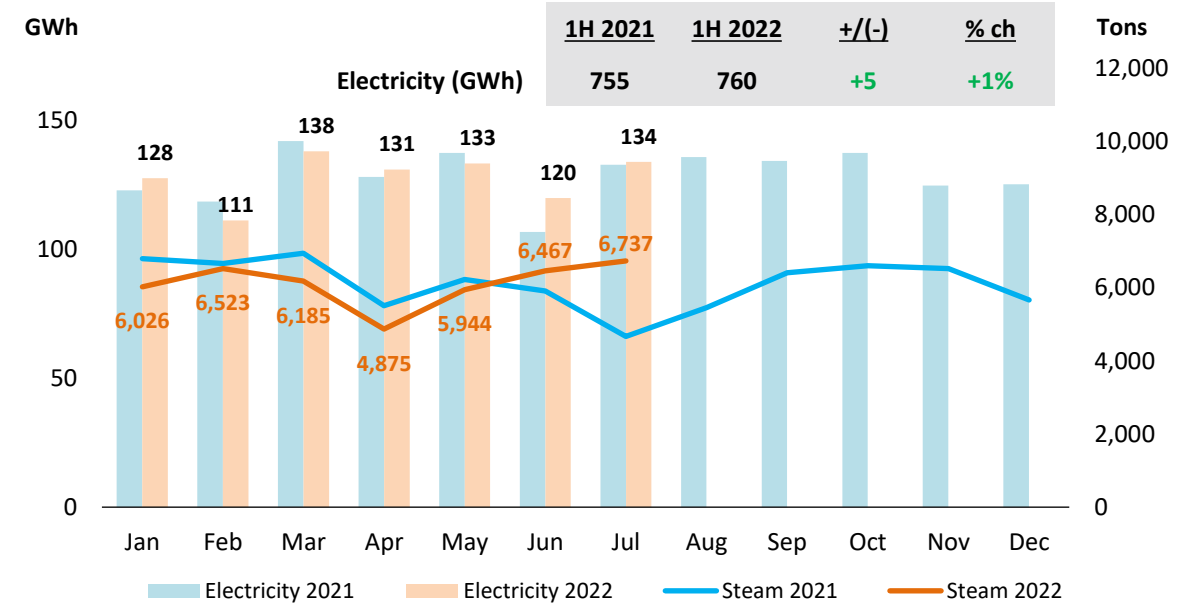
## Total Revenue

Unit: Bt mn

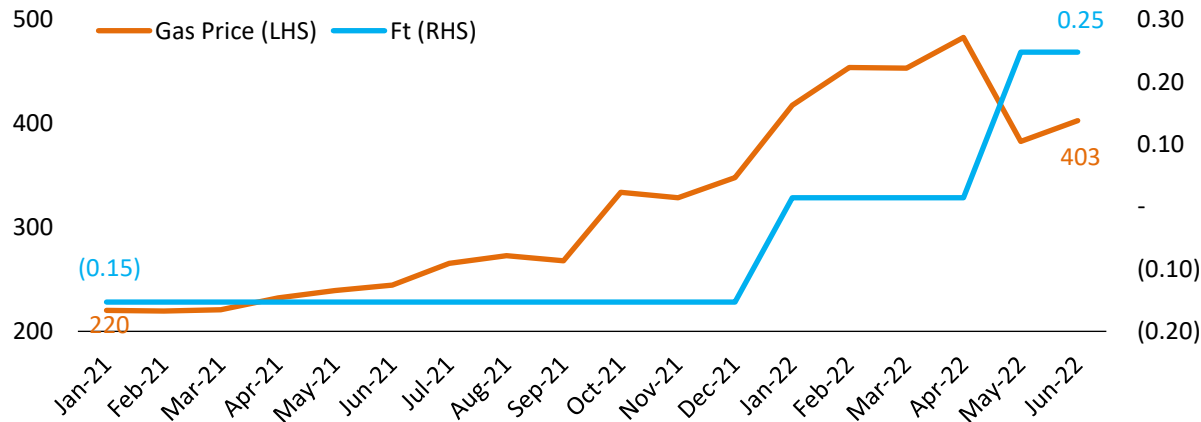
Total Revenue in 1H 2022 increased YoY, mainly driven by the rise in natural gas price following the global market price situation.



## Monthly Electricity and Steam Production



## Historical Gas Price and Ft



## Electricity and Steam Sale Volume

	2017	2018	2019	2020	2021	1H 2021	1H 2022
EGAT	959	1,277	1,250	1,236	1,238	603	607
IUs	158	276	311	300	306	151	153
<b>Total (GWh)</b>	<b>1,117</b>	<b>1,553</b>	<b>1,561</b>	<b>1,536</b>	<b>1,544</b>	<b>755</b>	<b>760</b>
<b>Steam (Tons)</b>	<b>106,645</b>	<b>94,459</b>	<b>87,486</b>	<b>74,026</b>	<b>73,395</b>	<b>38,057</b>	<b>36,020</b>
<b>Avg. gas price (Bt/MMBTU)</b>	<b>236</b>	<b>258</b>	<b>273</b>	<b>245</b>	<b>266</b>	<b>229</b>	<b>432</b>

# BKC 1H 2022 Performance

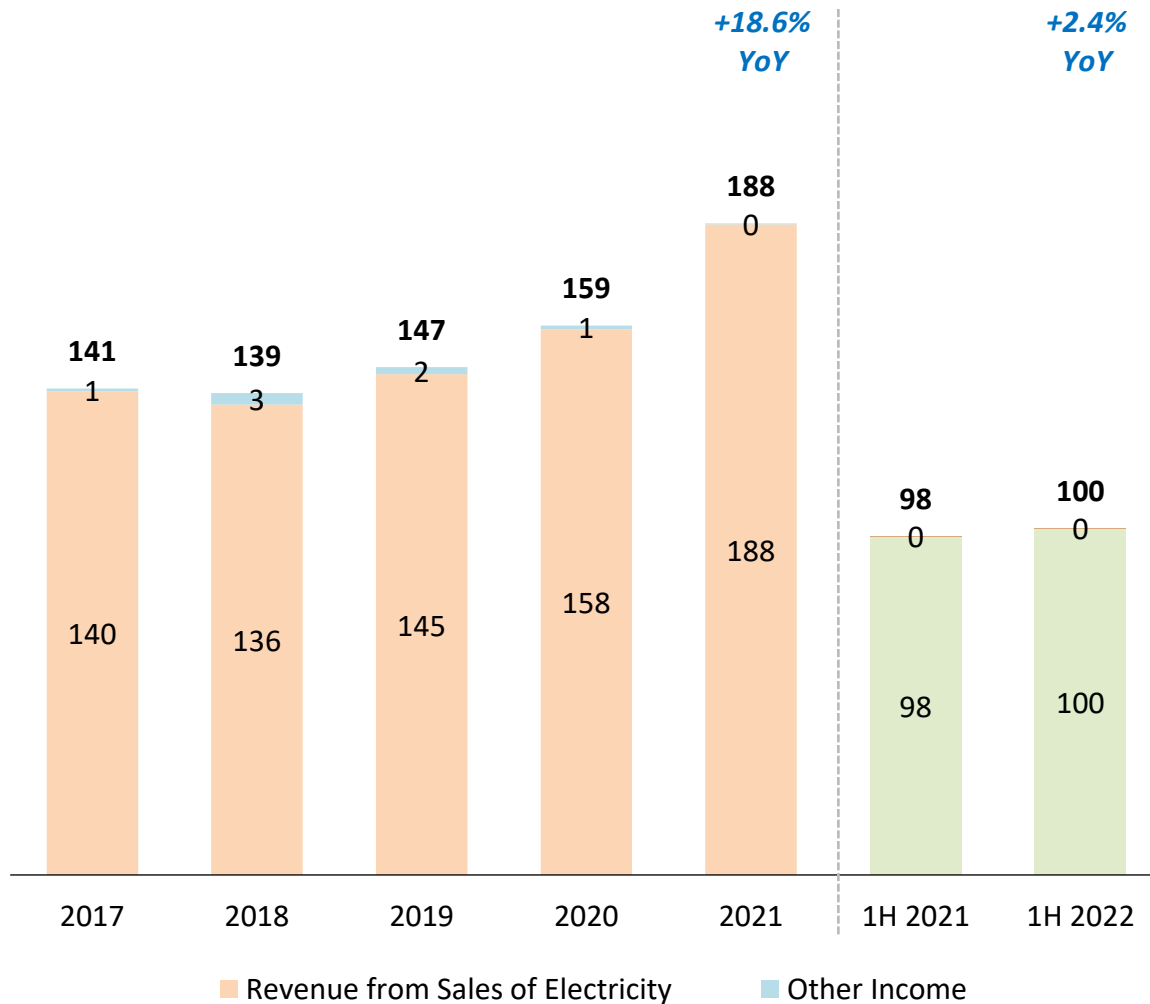
Consolidated  
Subsidiary



## Total Revenue<sup>(1)</sup>

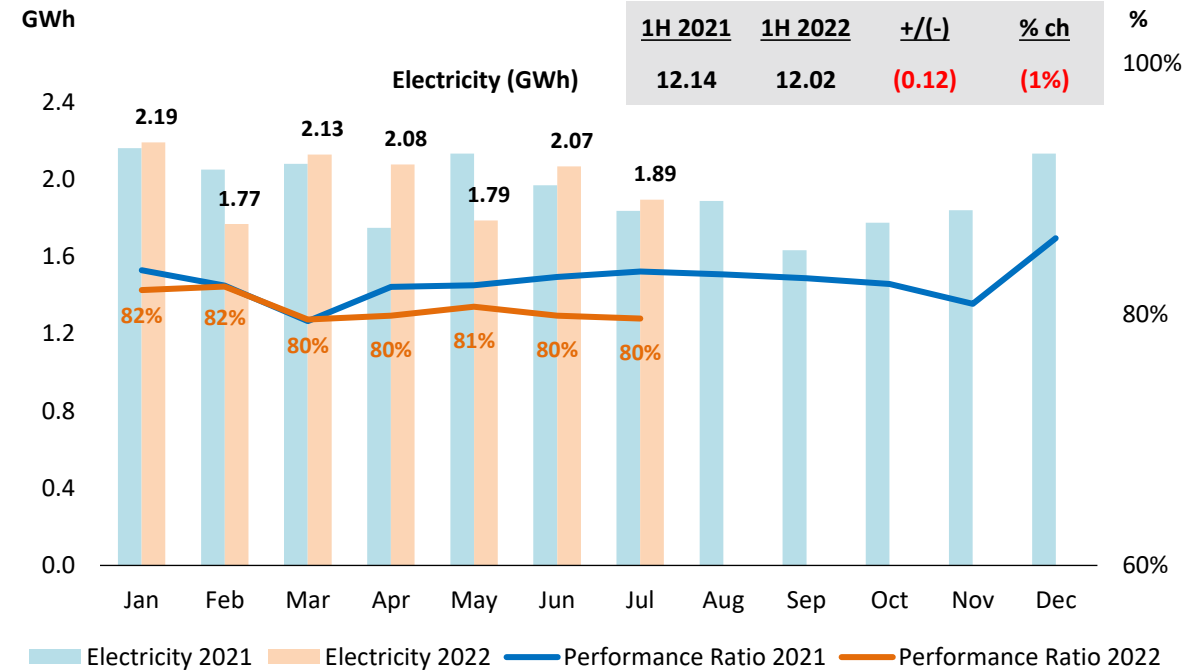
Unit: Bt mn

1H 2022 revenue increased YoY, driven by rising wholesale Ft rate compared to the same period last year.



## Monthly Electricity Production<sup>(1)</sup>

GWh



## Electricity Sales Volume<sup>(1)</sup>

Unit: GWh

	2017	2018	2019	2020	2021	1H 2021	1H 2022
Electricity (GWh)	12.71	12.27	15.55	20.13	23.25	12.14	12.02
Avg. Ft <sup>(2)</sup> (Bt/kWh)	(0.35)	(0.30)	(0.20)	(0.26)	(0.35)	(0.36)	(0.06)

(1) Include Revenue and Electricity Sales of new solar rooftop power plants and solar farm; (2) Wholesale Ft rate

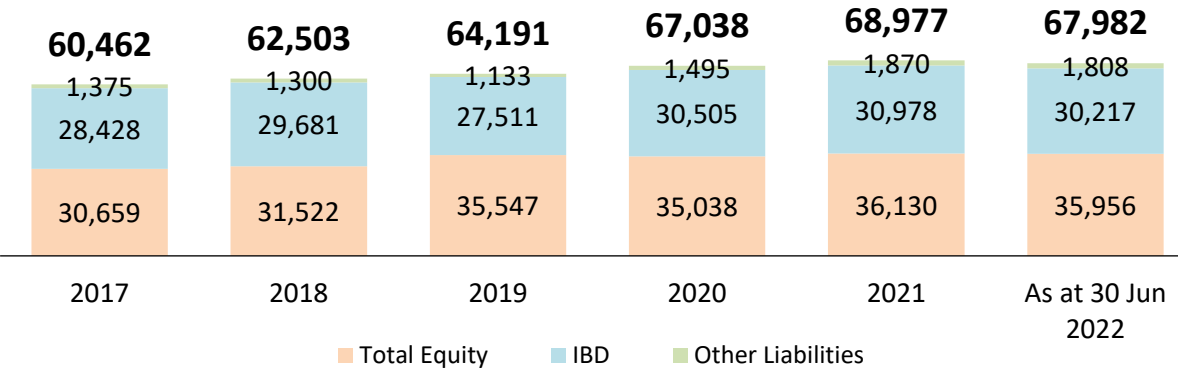


# Consolidated Financial Position as at 30 June 2022

## Financial Position

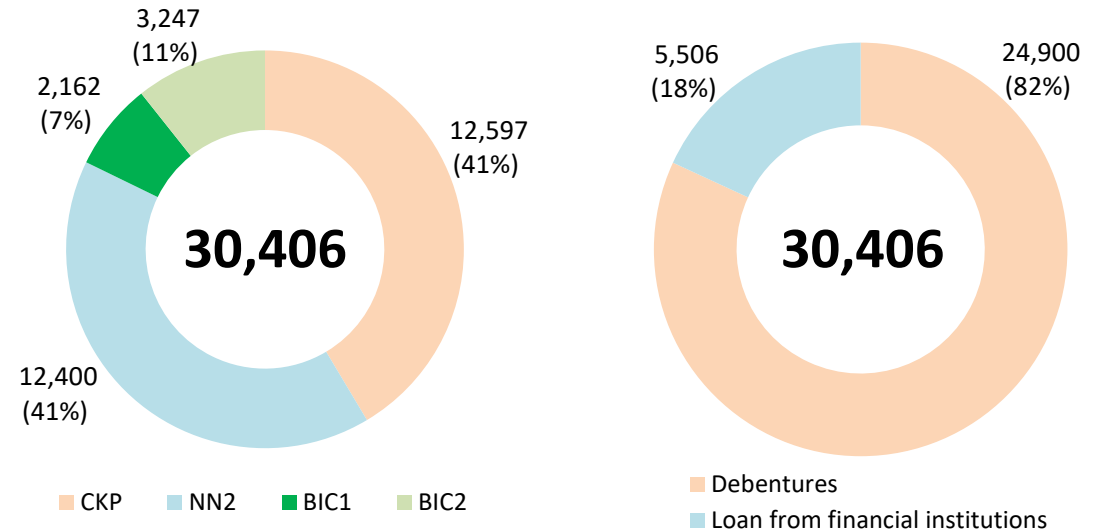
Unit: Bt mn

Total Assets as at 30 June 2022 decreased mainly from the decline in cash after the redemption of NN2's debentures, the dividend payment, the repayments of long-term loan from financial institutions and the recognition of depreciation.



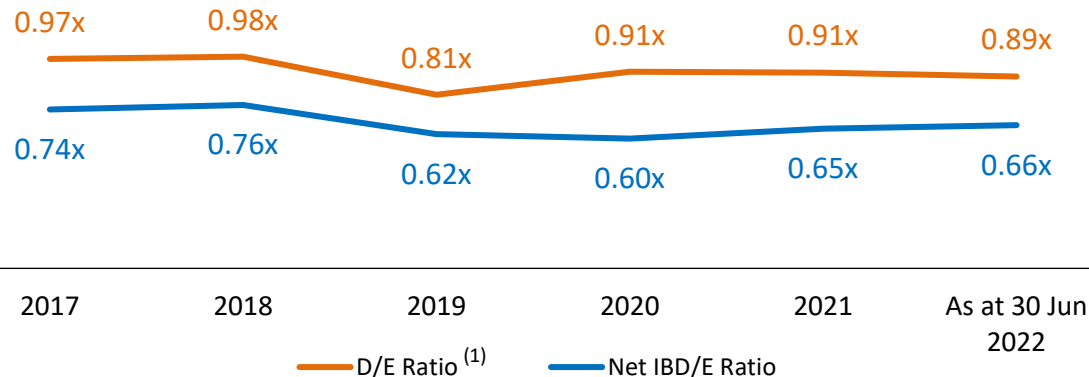
## Long-term Loan and Debentures<sup>(2)</sup>

Unit: Bt mn

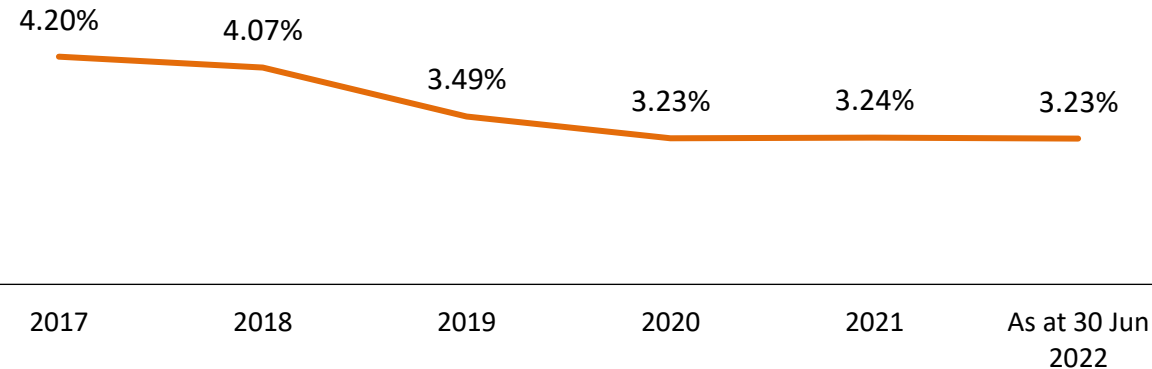


## Leverage Ratios

CKP's Debentures Covenant: Net IBD/E Ratio not exceeding 3.00x

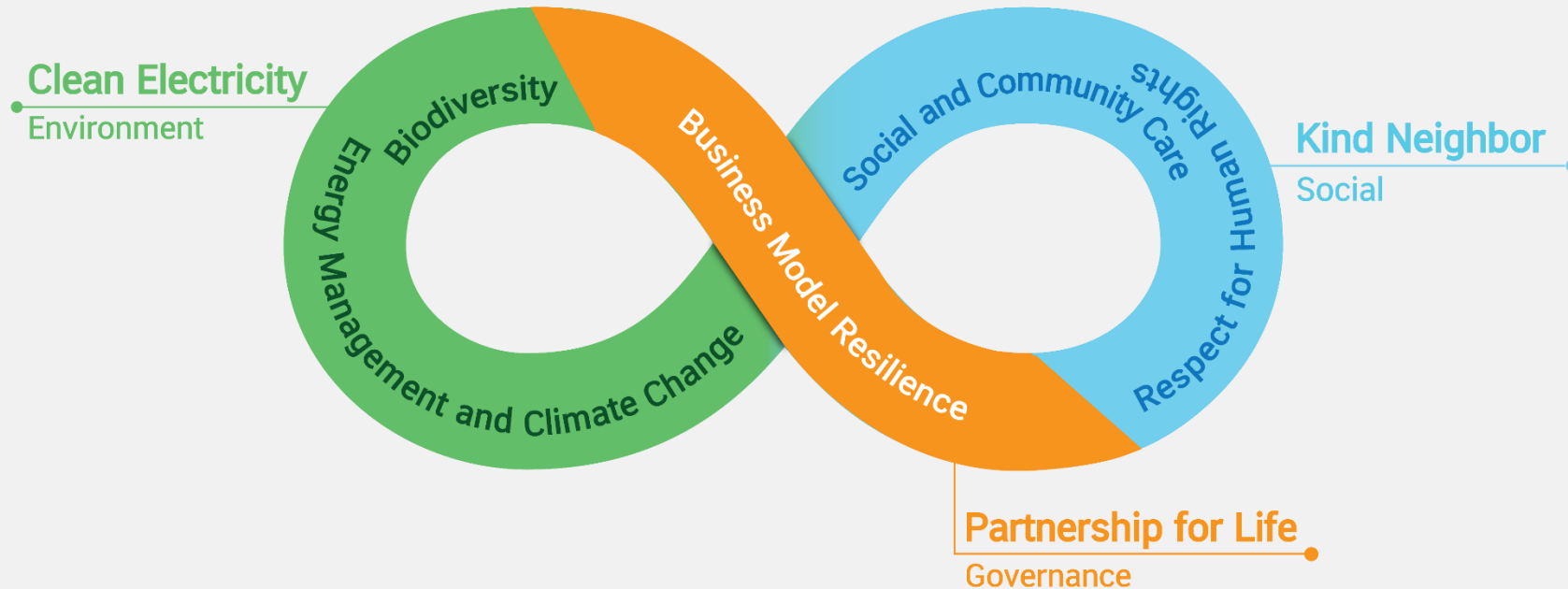


## Average Cost of Debt



(1) D/E Ratio calculated from Total Liabilities divided by Total Shareholders' Equity; (2) Loan and debentures outstanding before transaction costs

## RENEWABLE ENERGY FOR A SUSTAINABLE FUTURE



### Investor Relations

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