RATCH Group Public Company Limited Management Discussion and Analysis

For the Year Ended 31 December, 2021





Abbreviation	
The Company	RATCH Group Public Company Limited
The Group	RATCH Group Public Company Limited and its subsidiaries
EGAT	Electricity Generating Authority of Thailand
COD	Commercial Operation Date
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
FX	Foreign Exchange Rate
IPP	Independent Power Producer
PPA	Power Purchase Agreement
SPP	Small Power Producer

Projects/Compa	nies
BCIL	Bangkok Chain International (Lao) Co., Ltd, RL in proportion of 9.91 percent
FRD	Fareast Renewable Development Pte. Ltd., RHIS in proportion of 90 percent
НКН	Hin Kong Power Holding Company Limited, a joint venture in proportion of 51 percent
НКР	Hin Kong Power Company Limited, an indirect joint venture wholly-owned by HKH
HPC	Hongsa Power Company Limited, an indirect joint venture in proportion of 40 percent
NRER	Nexif Ratch Energy Rayong Company Limited, an indirect joint venture wholly-owned by NRES
NRES	NEXIF RATCH ENERGY SINGAPORE PTE LTD, an indirect joint venture in proportion of 49
	percent
PNPC	Xe-Pian Xe-Namnoy Power Company Limited, a direct joint venture in proportion of 25 percent
PRINC	Principal Capital Public Company Limited, in proportion of 10 percent
RAC	RATCH-Australia Corporation Pty Ltd, a wholly-owned indirect subsidiary
RCO	RATCH Cogeneration Company Limited, a subsidiary in proportion of 99.97 percent
RG	Ratchaburi Electricity Generating Company Limited, a wholly-owned subsidiary
RHIS	RH International (Singapore) Corporation Pte Ltd, a wholly-owned indirect subsidiary
RIAU	PT Medco Ratch Power RIAU, an indirect joint venture in proportion of 49 percent
RL	RATCH-Lao Services Company Limited, a wholly-owned subsidiary
SCG	Sahacogen (Chonburi) Public Company Limited, a subsidiary in proportion of 51 percent
SEAN	Southeast Asia Energy Limited, a joint venture in proportion of 33.33 percent



Executive Summary

Unit: Million baht

	2021	2020	Increase (Decrease)	%	2019
Total revenues	44,293.29	39,521.99	4,771.30	12.1	43,220.07
Total cost and expenses	36,720.96	33,539.73	3,181.23	9.5	37,124.31
EBITDA	11,661.61	9,664.80	1,996.81	20.7	9,996.24
Gain (Loss) on FX	206.29	304.45	(98.16)	(32.2)	(132.48)
Profit to owner of the Company	7,772.02	6,286.68	1,485.34	23.6	5,963.28
Profit before FX	7,565.73	5,982.23	1,583.50	26.5	6,095.76

The operating result for the year 2021 showed the profit (attributable to owners of the Company) of THB 7,772.02 million, increasing from the previous year by THB 1,485.34 million. The increase is mainly owing to the increase in the share of profit of associates and joint ventures. Without the effect of FX of the Company and subsidiaries, the operating result for the year 2021 showed the profit of THB 7,565.73 million, increasing from the previous year by THB 1,583.50 million.





Business Overview and Significant Events in 2021

In 2021, the Company operates mainly in electricity generation, infrastructure and energy-related businesses in Thailand and throughout Asia Pacific and electricity generation remains our primary business. The Company has realized and emphasized the importance of business operation that creates economic, social, and environmental values. In 2021, the Company can reduce greenhouse gas through various campaigns such as increase in energy efficiency, renewable projects, forest planting, and green area via Love the Forest and the Community Project.

Every year, the Company reviews changes of the stakeholders involved in the Company's businesses from electricity generation and energy-related to infrastructure businesses. The review is to ensure appropriate, transparent and fair responses in all aspects to stakeholders affected by the Company's operations and those whose actions may send impacts on the Company.

In the circumstance of the COVID-19 pandemic, the Company put in place preventive measures in line with the government and the Ministry of Public Health's measures. In addition, the company has been supporting various hospitals through monetary donation for medical equipment and medicines in order to prevent and stop the spread of the virus.

The Company has intended to operate with sustainability and good governance. On November 4, 2021, the Company was granted Highly Commended in Sustainability Awards in Sustainability Excellence category of SET Awards 2021. The SET Awards is for listed companies who exceptionally conduct business based upon sustainable development principles by implementing good governance practice and responsibility for all relevant stakeholders in order to balance economic growth, and social and environment development. In addition, the Company has been listed in the 2021 Thailand Sustainability Investment (THSI 2021) by the Stock Exchange of Thailand, for seventh consecutive year. In December 2021, the Company was also granted Money and Banking Awards 2021 for listed companies with outstanding financial performance and Sustainability Disclosure Award, for third consecutive year, from Thaipat Institute for companies who disclose economic, social, and environmental information, not limit to financial information. This can be considered that the Company has been widely recognized for its sustainable business operations.



Significant Events of the Year 2021

1.1 Shareholding in Bangkok Aviation Fuel Services Public Company Limited

On January 19, 2021, the Company has been completely transferred the shares of Bangkok Aviation Fuel Services Public Company Limited ("BAFS") for 98,983,125 shares (or equivalent to 15.53 percent of total issued and paid-up shares in BAFS) from Thai Airways International Public Company Limited ("THAI"). The purchase price is THB 27.40 per share at the total amount of THB 2,712.14 million.

1.2 Full Operation Commencement of Yandin Wind Farm in the Commonwealth of Australia

On March 19, 2021, Yandin Wind Farm in the Commonwealth of Australia, the Company held 70 percent through RAC, achieved Interim Approval from the grid connection authority and entered commercial operation at full capacity. Yandin has officially commenced COD on December 9, 2021.

Yandin Wind Farm has the capacity of 214.2 megawatts with a 15-year PPA with Alinta Sales Pty Ltd.

1.3 Full Operation Commencement of Collector Wind Farm in the Commonwealth of Australia

On April 7, 2021, Collector Wind Farm in the Commonwealth of Australia, the Company held 100 percent through RAC, entered commercial operation at full capacity. The project has two long term PPAs covering 79.6 percent of output. These are with Infigen Energy for 60 percent of output and ALDI Foods Pty. Ltd. (a subsidiary of global supermarket company, ALDI) for 19.6 percent of generation and the remaining electricity generated will be sold in the Commonwealth of Australia's National Electricity Market. Both PPAs can now operate, and certifications are finalized with the grid connection authority on June 18, 2021.

1.4 Signing of Share Purchase and Subscription Agreement to Invest in Near-Shore Wind Power Plant Project in the Socialist Republic of Vietnam

On May 5, 2021, RHIS has entered into share purchase and subscription agreement to purchase 50 percent of ordinary shares of NEXIF ENERGY BT PTE. LTD. ("NEBTP"), totaling USD 8.68 million (equivalent to THB 272.58 million) from NEXIF ENERGY PTE. LTD., the existing shareholder.



The Project is a near-shore wind power plant with the capacity of 80 megawatts. It is located in Thanh Phu district of Ben Tre Province, Socialist Republic of Vietnam. It has a 20-year PPA with Vietnam Electricity ("EVN"). The project is currently under development (Green-field) and negotiating on the relevant contracts. The project is expected to commence COD in 2024 with an aim to distribute electricity generation to EVN under long-term PPA.

1.5 Investment in Ordinary Shares of Principal Capital Public Company Limited

On May 24, 2021, the Company invested in ordinary shares of Principal Capital Public Company Limited ("PRINC") at the proportion of 10 percent of PRINC's issued and paid-up shares for 380,857,051 shares at THB 4.09 per shares (or equivalent to THB 1,557.71 million).

PRINC had previously operated in real estate business. Afterwards, it acquired private hospital business and transformed its core business to private hospital business and private hospital management.

1.6 Signing of Share Purchase Agreement to Invest in the Coal-Fired Thermal Power Plants in the Republic of Indonesia and the Extraordinary General Meeting of Shareholders No. 1/2021

On June 22, 2021, RHIS has signed a share purchase agreement for a purpose of investment in the coal-fired thermal power plants in the Republic of Indonesia, the transaction of which comprise the purchase of ordinary shares of 45.515 percent in each of PT Paiton Energy ("PE") and in Minejesa Capital B.V. ("MCBV") in the power plant business, and the purchase of ordinary shares of 65 percent in IPM Asia Pte. Ltd. ("IPM") in the power plant operation and maintenance business (collectively referred to as the "Paiton"), totaling USD 809.60 million or equivalent to THB 25,421.68 million).

Paiton is a project operating the coal-fired thermal power plants with a total capacity of 2,045 MW located at Paiton Power Complex in East Java, the Republic of Indonesia.

The Board of Directors' Meeting of the Company No. 8/2021 held on August 24, 2021 has proposed to shareholders for the approval of RHIS investment in the transaction. On October 21, 2021, the Extraordinary General Meeting had approved such investment.



1.7 <u>Capital Increase and Issuing and Offering of New Ordinary Shares in Proportion to the Shareholding of Existing Shareholders, excluding Shareholders whose Holding of Such Share that would Subject the Company to any Obligations under the Law of Other Jurisdictions</u>

On June 22, 2021, the Board of Directors of the Company has approved to propose to the Extraordinary General Meeting of Shareholders to consider and approve the increase of the registered capital of the Company from THB 14,500.00 million to THB 22,192.31 million by way of issuing new ordinary shares in the amount of 769,230,770 shares at par value of THB 10 each, totaling THB 7,692.31 million for issuing and offering to existing shareholders in proportion to their shareholding, excluding shareholders whose holding of such share would subject the Company to any obligations under the law of other jurisdictions (Preferential Public Offering: PPO), at an offering ratio of not less than 1.885 existing ordinary shares to 1 new ordinary share.

1.8 Signing of Sustainable Loan Agreement

On June 30, 2021, RHIS (as the Borrower) and the Company (as the Guarantor) have executed USD 150 million Sustainable Loan Agreement with International Finance Corporation ("IFC") to fund and/or refinance the capital expenditures incurred or to be incurred to support renewable power projects or other green infrastructure projects or projects in other non-infrastructure sectors in Thailand, Socialist Republic of Vietnam, Republic of Indonesia and Lao PDR.

1.9 Signing of Capital Increase Share Purchase Agreement to Invest in Private Hospital in Lao PDR

On July 30, 2021, RL has signed a capital increase share purchase agreement of Bangkok Chain International (Lao) Company Limited ("BCIL") at 9.91 percent totaling THB 190 million. The purpose of the transaction is to invest in Kasemrad International Hospital in Vientiane, Lao PDR. On August 26, 2021, RL has already paid for the capital increase shares and registered the share transfer.

Kasemrad International Hospital in Vientiane, Lao PDR is a private tertiary hospital, offering a complete range of services with the total of 110 beds (in the first phase which) with a plan to increase to 254 beds in the second phase. It began commercial service on August 19, 2021.



Such investment is in line with the Group's investment plan, which will generate new S-curve in Lao PDR and expand into new stable business with high growth potential and appropriate return on investment. The transaction will also create business partnership with Bangkok Chain Hospital Public Company Limited ("BCH"), which could increase the opportunity to jointly invest in health care and related businesses in the future.

1.10 Establishment of a Joint Venture Company for Innovation and Invention

On September 13, 2021, the Company in collaboration with EGAT and Electricity Generating Public Company Limited ("EGCO") has registered the establishment of Innopower Company Limited ("Innopower"), a joint venture company with the investment proportion of 30, 40 and 30 percent respectively.

Innopower is established to enhance research in innovation and inventions occurring within EGAT Group or arising from the cooperation with partners to expand commercial business through this company. The purpose is also to prepare for the establishment of R&D spin-off projects including investment in start-up business of new S-curve business of energy industry through 4 main units of Innopower comprising new business idea support unit (Collaborator), business incubator unit (Incubator), business growth accelerating unit (Accelerator) and Corporate Venture Capital Unit (CVC).

1.11 Execution of the Public Private Partnership for Operation and Maintenance (0&M) contracts of M6 and M81 Intercity Motorway projects

On September 29, 2021, BGSR 6 Company Limited ("BGSR 6") and BGSR 81 Company Limited ("BGSR 81"), joint venture companies in which the Company holds equity interest of 10 percent with BTS Group Holdings Public Company Limited, Gulf Energy Development Public Company Limited, and Sino-Thai Engineering and Construction Public Company Limited, which hold equity interests of 40, 40 and 10 percent respectively, have entered into Public Private Partnership for Operation and Maintenance (O&M) contracts with the Department of Highways to operate the Bang Pa-In — Nakhon Ratchasima M6 Intercity Motorway project, with a distance of 196 kilometers, and the Bang Yai — Kanchanaburi M81 Intercity Motorway project, with a distance of 96 kilometers. The commercial operations of both projects are scheduled in 2024.



1.12 Purchasing of Ordinary Shares of a Hydroelectric Power Plant in the Republic of Indonesia

On November 19, 2021, RHIS has invested in an additional 40 percent of ordinary shares in FRD, totaling 13,544,257 shares, valuing at approximately USD 54.31 million or equivalent to approximately Baht 1,789 million. Such shares were purchased from Hydro Sumatra International Pte. Ltd. ("HSI"). The shareholding structure would be RHIS with 90 percent ownership (previous ownership is 50 percent) and HSI with 10 percent ownership in FRD. As a result, the Company's indirect shareholding in Asahan-1 Hydroelectric Power Plant through RHIS and FRD will be increased to 47.89 percent (previously 26.61 percent).

In this regard, Asahan-1 is a run-of-river hydroelectric power plant with the generation capacity of 180 megawatts. It is located in Asahan River, North Sumatra Province in the Republic of Indonesia. It has commenced commercial operation since January 2011 and has 30-year power purchase agreement ending on 31 December 2040 with PT PLN (Persero).

1.13 Purchasing of Ordinary Shares of Sahacogen (Chonburi) Public Company Limited

On December 13, 2021, the Company has completed the purchase of the ordinary shares of Sahacogen (Chonburi) Public Company Limited ("SCG") from 34 shareholders in the total amount of 384,789,131 shares, and the purchase of newly issued ordinary shares of SCG in the amount of 208,695,652 shares. The company has therefore acquired a total amount of 593,484,783 ordinary shares in SCG, equivalent to 51 percent of the total issued shares in SCG, resulting in SCG to become a subsidiary of the Company.

SCG operates the business of producing and selling electricity and stream. It has a total power generation capacity of 214 megawatts and 96 tons per hour using natural gas fuel. In addition, SCG has invested in 2 biomass power plants, one of which located in the Saha Group Industrial Park-Lamphun, Lamphun Province with a capacity of 9.6 megawatts and the other one located in Kamphaeng Phet province with a capacity of 7.5 megawatts.



Progress of Projects under Construction (as of December 31, 2021)



Riau Power Plant			
Type of Fuel	Natural Gas		
Install Capacity (MW)	296.23		
Location	Republic of Indonesia		
Ownership	49%		
PPA	20 Years with PT PLN		
COD	February 2022		
Progress	99.37%		



MRT Pink Line Project			
Technology	Monorail		
Route	Khae Rai-Min Buri		
Ownership	10%		
Contract Term	30 Years		
COD	Year 2023		
Progress Civil Works = 85.59%			
Railway System = 81.45%			



MRT Yellow Line Project			
Technology Monorail			
Route	Lad Prao-Sam Rong		
Ownership	10%		
Contract Term	30 Years		
COD	Year 2022		
Progress	Civil Works = 90.60%		
Railway System = 86.23%			





Nexif Ratch Energy Rayong Power Plant (NRER)			
Type of Power Plant Firm-Cogeneration SPP Power Plant			
Type of Fuel	Natural Gas		
Capacity (MW)	92		
Location	Rayong Province		
Ownership	49%		
PPA	25 Years with EGAT		
COD April 2022			
Progress	93.81%		



Hin Kong Power Plant (HKP)			
Type of Power Plant IPP			
Type of Fuel	Natural Gas		
Install Capacity (MW)	1,400		
Location	Ratchaburi Province		
Ownership	51%		
PPA	25 Years with EGAT		
COD	Year 2024 and 2025		
Progress	24.50%		



Ratch Cogeneration Power Plant (RCO) - Extension				
Type of Power Plant	Firm-Cogeneration SPP Power Plant			
Type of Fuel	Natural Gas			
Install Capacity (MW)	Power Generating Capacity 30 MW / Steam			
	Generating Capacity 5.46 Tons per Hour			
Location	Pathum Thani Province			
Ownership	100%			
Customers	Navanakorn Industrial Promotion Zone,			
	Pathum Thani Province			
COD	Year 2022			
Progress	57.18%			





Thanh Phong Wind-Turbine Power Plant (ECOWIN)			
Install Capacity (MW) 29.7			
Location Ben Tre Province, Vietnam			
Ownership	51%		
PPA	20 Years with Vietnam Electricity		
COD	Year 2022		
Progress	73.20%		



R E N Korat Energy Power Plant (R E N)			
Type of Power Plant	Cogeneration IPS Power Plant		
Type of Fuel	Natural Gas		
Install Capacity (MW)	12		
Location	Nakhon Ratchasima Province		
Ownership	40%		
Customers	Industrial Promotion Zone, Nakhon		
	Ratchasima Province		
COD Year 2023			
Progress	Construction will start 1st Quarter of 2022		



2. Operation performance according to consolidated financial statement

Unit: Million baht

	2021	2020	Increase (Decrease)	%	2019
Total revenues	44,293.29	39,521.99	4,771.30	12.1	43,220.07
Total cost and expenses	36,720.96	33,539.73	3,181.23	9.5	37,124.31
	7,572.33	5,982.26	1,590.07	26.6	6,095.76
Non-controlling Interests	(6.60)	(0.03)	(6.57)	n.a.	-
Profit before FX - the Company and subsidiaries	7,565.73	5,982.23	1,583.50	26.5	6,095.76
Gain (loss) on FX - the Company and subsidiaries	206.29	304.45	(98.16)	(32.2)	(132.48)
Profit to owner of the Company	7,772.02	6,286.68	1,485.34	23.6	5,963.28

The operating result according to the consolidated financial statement showed the profit (attributable to owners of the Company) of THB 7,772.02 million or THB 5.36 per share, increasing by THB 1,485.34 million. The main reason was due to the increase in the share of profit of associates and joint ventures such as PNPC, HPC and SEAN. The operating result without the effect of FX gain (loss) of the Company and subsidiaries showed the profit of THB 7,565.73 million, increasing from the same period of the previous year by THB 1,583.50 million.



2.1 Analysis of Revenues

Unit: Million baht

	2021	2020	Increase (Decrease)	%	2019
Revenue from sales and rendering of services	35,231.48	31,652.54	3,578.94	11.3	35,441.11
RG	28,992.37	26,839.80	2,152.57	8.0	31,901.76
RAC	3,734.35	2,684.83	1,049.52	39.1	2,990.26
RCO	2,219.38	2,065.88	153.50	7.4	495.38
FRD / SCG	216.12	-	216.12	-	-
RL	<i>69.26</i>	62.03	7.23	11.7	53.71
Revenue from leases contracts	2,095.30	2,553.21	(457.91)	(17.9)	2,923.23
Share of profit of associates and joint ventures	5,902.40	4,600.34	1,302.06	28.3	3,968.38
IPPs	3,828.55	3,288.76	539.79	16.4	2,904.25
SPPs	435.80	426.26	9.54	2.2	338.65
Hydro Power Plants	1,092.98	69.02	1,023.96	n.a.	66.75
Renewable Power Plants	427.77	403.13	24.64	6.1	356.00
Infrastructure and Others	117.30	413.17	(295.87)	(71.6)	302.73
Management service income	224.30	276.31	(52.01)	(18.8)	244.24
Interest income	205.35	159.41	45.94	28.8	205.52
Dividend income	58.83	61.18	(2.35)	(3.8)	100.88
Gain on bargain purchase	177.67	-	177.67	-	269.92
Other income	397.96	219.00	178.96	81.7	66.79
Total revenues	44,293.29	39,521.99	4,771.30	12.1	43,220.07

2.1.1 Revenue from sales and rendering of services

- (1) Revenue from sales of RG increased. The main reason was the increase in Energy Payment due to the increase in fuel price. In contrast, Availability Payment decreased since Base Availability Credit in 2021 decreased, comparing to that of 2020, as specified in the PPA. In addition, the PPA of Tri Energy Power Plant was expired in June 30, 2020.
- (2) Revenue from sales of RAC increased as Collector Power Plant has commenced COD on June 18, 2021. In addition, Mount Emerald Wind Farm Project generated more electricity than that of the previous year.
- (3) Revenue from sales of RCO increased since the power plant generated more electricity than that of the previous year. In addition, the fuel price increased.



(4) Revenue from sales of FRD has been consolidated after the additional acquisition on November 19, 2021, and revenue from sales of SCG has been consolidated after the acquisition on December 13, 2021.

2.1.2 Share of profit of associates and joint ventures

Hydro Power Plants

The share profits of PNPC and SEAN increased as the water level of Xepian Xe-Namnoy and Nam Ngum 2 Hydro Power Plants was higher than that of the previous year. As a result, they generated electricity more than that of the previous year.

IPPs

The share profit of HPC increased. The main reason was the higher availability and generated electricity than those of the previous year.

2.1.3 Gain of bargain purchase of a Hydroelectric Power Plant in the Republic of Indonesia

On November 19, 2021, RH International (Singapore) Corporation Pte Ltd, a wholly-owned indirect subsidiary, has additionally invested in FRD in a total of 90 percent (previously 50 percent). As a result, the Company recognized gain on bargain purchase from such transaction in the amount of THB 177.67 million



2.2 Analysis of Cost and Expenses

Unit: Million baht

	2021	2020	Increase (Decrease)	%	2019
Cost of sales and rendering of services	33,116.50	30,228.69	2,887.81	9.6	33,228.03
RG	28,536.48	26,576.47	1,960.01	7.4	30,959.28
RAC	2,164.64	1,795.69	368.95	20.5	1,795.58
RCO	2,145.37	1,813.52	331.85	18.3	435.32
SCG	226.21	-	226.21	-	-
RL	43.80	43.01	0.79	1.8	37.85
Administrative expenses	1,701.84	1,601.09	100.75	6.3	1,595.99
(Gain) Loss on fair value adjustment of derivatives	(143.51)	130.24	(273.75)	(210.2)	(0.35)
Finance costs	1,868.07	1,551.35	316.72	20.4	1,430.57
Tax expense	178.06	28.36	149.70	527.9	870.07
Total Cost and expenses	36,720.96	33,539.73	3,181.23	9.5	37,124.31

2.2.1 Cost of sales and rendering of services

- (1) Cost of sales of RG increased due to the increase in fuel cost more than that of the previous year.
- (2) Cost of sales of RAC increased since Collector Power Plant has commenced COD on June 18, 2021.
- (3) Cost of sales of RCO increased due to the recognition of the maintenance expenses of the gas turbine that was damaged in September 2020 (maintenance completed in September 2021). In addition, fuel cost increased.
- (4) Cost of sales of SCG has been consolidated after the acquisition on December 13, 2021.

2.2.2 The effect of fair value adjustment of derivatives

The Company recorded the effect on fair value adjustment of derivatives according to the adopted accounting policies for derivatives and hedge accounting. The main reason was the change in fair value adjustment of cross currency swap contract between JPY and AUD currencies to manage exposure of fluctuations in foreign exchange risk on borrowings.



2.2.3 Finance Costs

Finance costs increased due to the increase in loans from financial institutions.

2.2.4 Income Tax

Income tax increased since in year 2020, RG received tax benefit from the sale of Tri Energy Power Plant more than that of the year 2021.

2.3 The effect of exchange rate of the Company and its subsidiaries

In 2021, the Company recorded gain on FX. The main reason was from JPY Bond. As JPY depreciated in relative to USD, the liability value in JPY decreased. Likewise, the Company recorded gain on FX in 2020. The main reason was from loan to related parties in AUD. As AUD appreciated in relative to USD, the asset value in AUD increased.



3. Analysis of statement of financial position

3.1 Analysis of assets

As at December 31, 2021, the total assets were THB 154,855.31 million, increasing by THB 42,723.06 million or 38.1 percent from THB 112,132.25 million as at December 31, 2020. The details were as follows:

(Million Baht)

	Dec 31, 2021	Dec 31, 2020	Increase (Decrease)	%
Current assets	25,315.77	18,484.69	6,831.08	37.0
Non-current assets	129,539.54	93,647.56	35,891.98	38.3
Total Assets	154,855.31	112,132.25	42,723.06	38.1

(Willion Dant)
31-Dec-19
20,479.77
79,749.66
100,229.43

- 3.1.1 Investments in joint ventures and associates increased in the amount of THB 10,279.23 million. The main reasons were from additional investments in the amount of THB 4,657.65 million, the share of profit contributed during the year in the total amount of THB 5,902.40 million, and exchange rate adjustment in the amount of THB 3,151.34 million. In contrast, investments in joint venture decreased in the amount of THB 2,930.15 million, as FRD became a subsidiary.
- 3.1.2 Trade accounts receivable from related parties of RG increased in the amount of THB 3,450.44 million as the electricity sales in November and December 2021 were higher than those in November and December 2020.
- 3.1.3 Property, plant and equipment increased in the amount of THB 6,748.27 million. The main reason was the Company has completed the purchase of the ordinary shares of SCG on December 13, 2021, as described in no. 1.13.
- 3.1.4 Lease receivables increased in the amount of THB 15,111.42 million since RHIS has invested in FRD on November 19, 2021, as described in no. 1.12.



3.2 Analysis of liabilities and equity

As at December 31, 2021, the total liabilities and equity were THB 154,855.31 million, increasing by THB 42,723.06 million or 38.1 percent from THB 112,132.25 million as at December 31, 2020. The details were as follows:

(Million Baht)

	Dec 31, 2021	Dec 31, 2020	Increase (Decrease)	%
Liabilities	77,045.77	51,610.68	25,435.09	49.3
Equity	77,809.54	60,521.57	17,287.97	28.6
Total Liabilities and Equity	154,855.31	112,132.25	42,723.06	38.1

(IVIIIIIOII Daiit)
Dec 31, 2019
40,815.50
59,413.93
100,229.43

- 3.2.1 Liabilities increased in the amount of THB 25,435.09 million, the main reasons were as follows:
- (1) The Company and RHIS received short-term loan from financial institutions during the year in the amount of THB 2,536 million and USD 45 million respectively.
- (2) Trade accounts payable of RG increased in the amount of THB 3,151.10 million as the power plant generated more electricity in November and December 2021 than that in November and December 2020.
- (3) Long-term loan from financial institutions increased in the amount of THB 11,161.42 million since the Company received long-term loans from financial institutions during the year in the amount of THB 5,000 million. In addition, FRD and SCG has been consolidated after the additional acquisition, as described in no. 1.12 and 1.13 respectively, and loans in USD increased since THB depreciated in relative to USD.
- 3.2.2 Equity increased in the amount of THB 17,287.97 million. The main reasons were as follows:
 - (1) The Company had the profit of the year 2021 in the amount of THB 7,772.02 million
 - (2) Non-controlling interests increased by Baht 7,519.15 million.



- (3) Other components of equity increased in the amount of THB 5,476.80 million. The main reasons were due to translation reserve in the amount of THB 3,199.77 million, share of other comprehensive income (expense) of associates and joint ventures in the amount of THB 1,599.14 million, and hedging reserve in the amount of THB 601.64 million.
- (4) The dividend payment during the year 2021 decreased retained earnings in the amount of THB 3,480 million.



Analysis of cash flows

Cash and cash equivalents of the Company and its subsidiaries as at December 31, 2021 were THB 6,961.49 million, increasing by THB 2,104.90 million from THB 4,856.59 million on December 31, 2020. The details were summarized below:

(Million Baht)

	2021
Net cash from operating activities	7,153.57
Net cash used in investing activities	(7,648.75)
Net cash from financing activities	2,384.57
Effect of exchange rate changes on cash and cash equivalents	215.51
Net cash increase during the period	2,104.90

- 4.1 Net cash from operating activities increased cash flow in the amount of THB 7,153.57 million. The reason was the operating result of the year 2021 improved cash position by THB 5,290.51 million, adjusted by the change in operating assets and liabilities in the amount of THB 1,863.06 million.
- 4.2 Net cash used in investing activities decreased cash flow in the amount of THB 7,648.75 million. The main reasons were as follows:
 - 4.2.1 The Company paid for plant and equipment in the amount of THB 1,893.53 million.
- 4.2.2 The Company paid for additional investment in subsidiaries, joint ventures and associates in the total amount of THB 7,181.84 million.
 - 4.2.3 The Company received dividends in the total amount of THB 2,208.83 million.
- 4.3 Net cash from financing activities increased cash flow in the amount of THB 2,384.57 million. The main reasons were as follows:
- 4.3.1 The Company and RHIS received short-term loans from financial institutions during the year in the amount of THB 2,536 million and USD 45 million respectively.
- 4.3.2 The Company received long-term loans from financial institutions during the year in the amount of THB 5,000 million. In contrast, SCG and FRD repaid long-term loans from financial institutions in the amount of THB 308.92 million and USD 4.48 million respectively.
 - 4.3.3 The Company paid dividend to owners in the amount of THB 3,480.22 million.
- 4.3.4 The Company paid for interest expenses during the year in the amount of THB 1,715.47 million.



5. Significant financial ratios (excluded the effect of foreign exchange rate of the Company and its subsidiaries)

Ratios		2021	2020	2019
Current Ratio	(Times)	1.25	2.69	2.70
Profit to Total Revenue (excluded fuel costs)	(%)	40.30	37.03	38.90
Return on Equity	(%)	11.57	9.98	10.21
Return on Assets	(%)	7.10	7.24	8.33
EBITDA *	(Million THB)	11,662	9,665	9,996
EBITDA to Total Assets	(%)	8.74	9.10	9.92
Debt to Equity Ratio	(Times)	0.99	0.85	0.69
Debt Service Coverage Ratio	(Times)	3.69	4.53	1.90
Book Value per Share	(THB)	48.48	41.74	40.97
* Not included the change in lease receivable	(Million THB)	2,575.60	3,346.05	1,359.51