

Happy Journey

ENDLESS
HAPPINESS
ON EVERY
JOURNEY

ANNUAL REPORT 2021

ANNUAL REGISTRATION STATEMENT (Form 56-1 One Report)

BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED





BEM is always committed to provide efficient services of the expressway and metro with the aim of improving the quality of life to bring endless happiness... on every journey.



VISION

The Company's vision is to become a leading, fully-integrated transportation service provider in Thailand and ASEAN.



MISSION

The Company is committed to operating the businesses:

1. Providing services of the expressway and metro systems with safety, convenience, rapidity, reliability, punctuality, and efficiency, in order to improve the quality of people's lives;
 2. Improving the quality and efficiency of the modern and full-service transportation network in order to alleviate traffic problems, preserve the environment, and improve society and the country;
 3. Creating value-added and utmost benefit to shareholders based on fairness to all stakeholders.
- 



GOALS AND BUSINESS STRATEGIES

To achieve the Company's objectives and mission, the Company has formulated major strategies in its business operations, as follows:

1. To invest in the transportation system projects, expressway and connecting road projects, metro system projects, and related projects under the government policy for public-private partnership (PPP) in respect of infrastructure, including related business, such as, various commercial development, taking into consideration the projects which are beneficial to society and the country, with reasonable business yields;
2. To strengthen the businesses by generating revenues for continued growth, and managing costs and expenses efficiently, in order to maintain good financial standing;
3. To build relationships with stakeholders through the corporate social responsibility process and communicate with internal and external personnel about it;
4. To develop personnel ready for the provision of quality services of the expressway and metro systems;
5. To build social recognition of the corporate good image.

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FINANCIAL SUMMARY

BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES

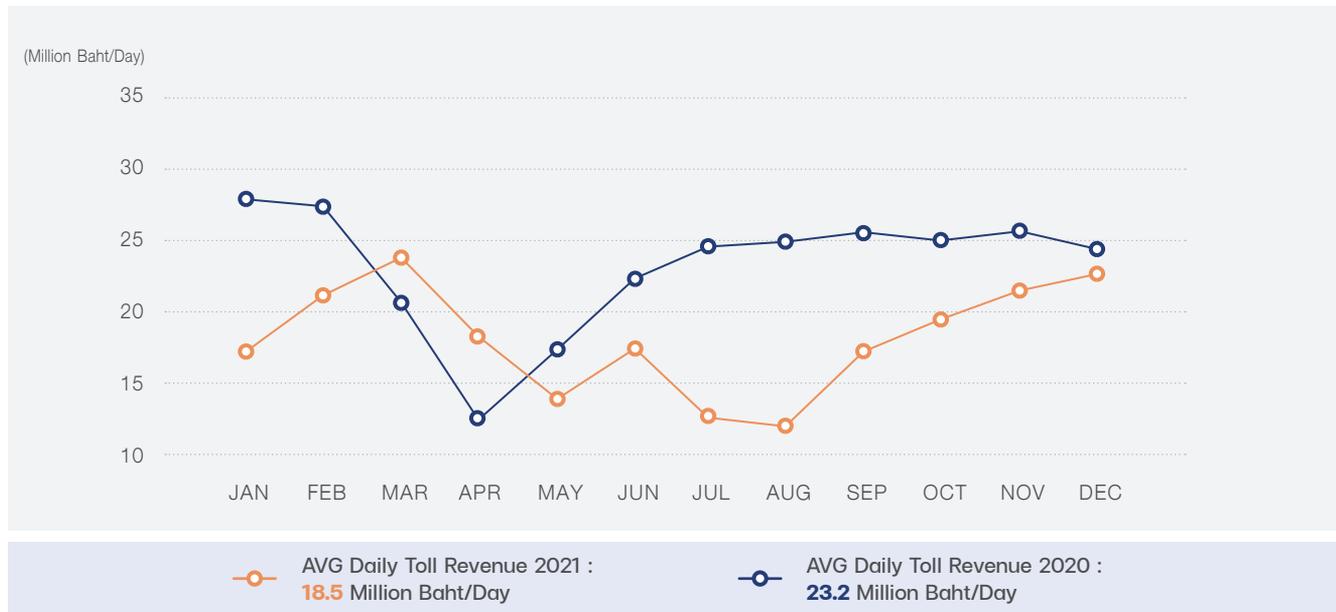
Unit : Million Baht

FINANCIAL HIGHLIGHTS

	2021	2020
Financial Position (As at December 31)		
Total assets	115,088	113,616
Total liabilities	77,389	75,582
Shareholders' equity	37,699	38,034
Operating Results (For the year ended December 31)		
Revenue from expressway business	6,450	8,145
Revenue from rail business	3,454	4,520
Revenue from commercial development business	822	825
Net profit attributable to the Company	1,010	2,051
Financial Ratios		
Net profit margin (%)	8.97	14.60
Return on equity (%)	2.67	5.35
Return on total assets (%)	0.95	2.00
Debt to equity ratio (times)	1.87	1.76
Interest bearing debt to equity ratio (times)	1.65	1.52
Book value per share (Baht)	2.47	2.49

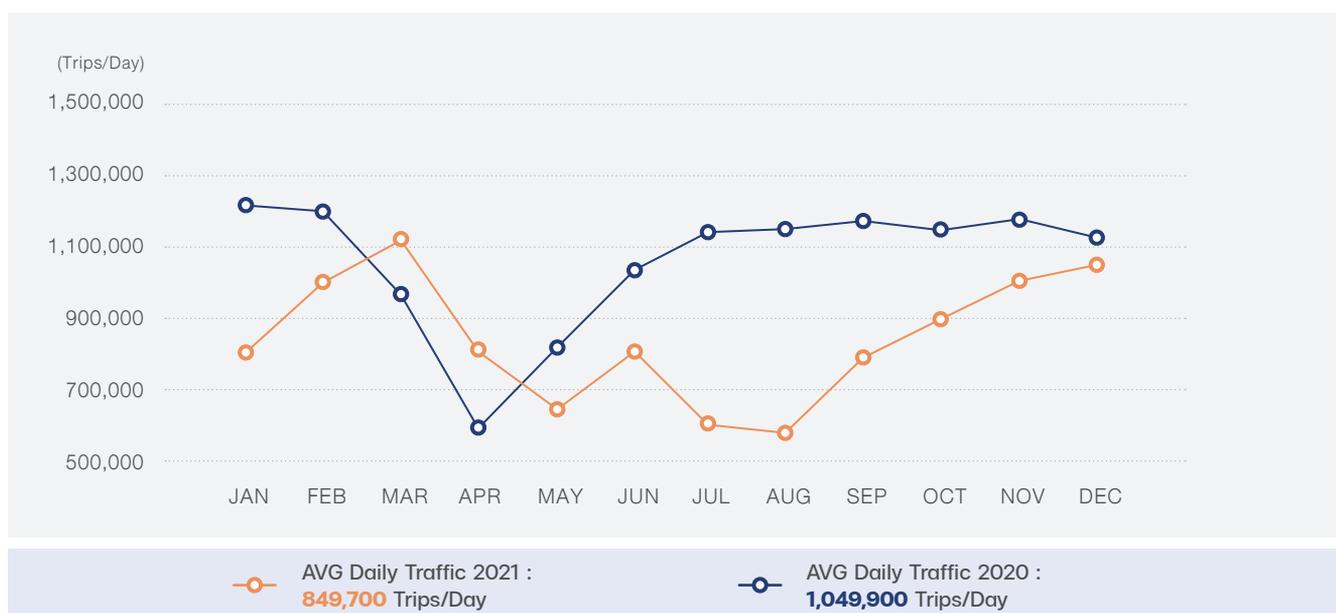
AVERAGE DAILY TOLL REVENUE :

Chalerm Mahanakorn, Si Rat, Udon Rattthaya and Si Rat - Outer Ring Road Expressway



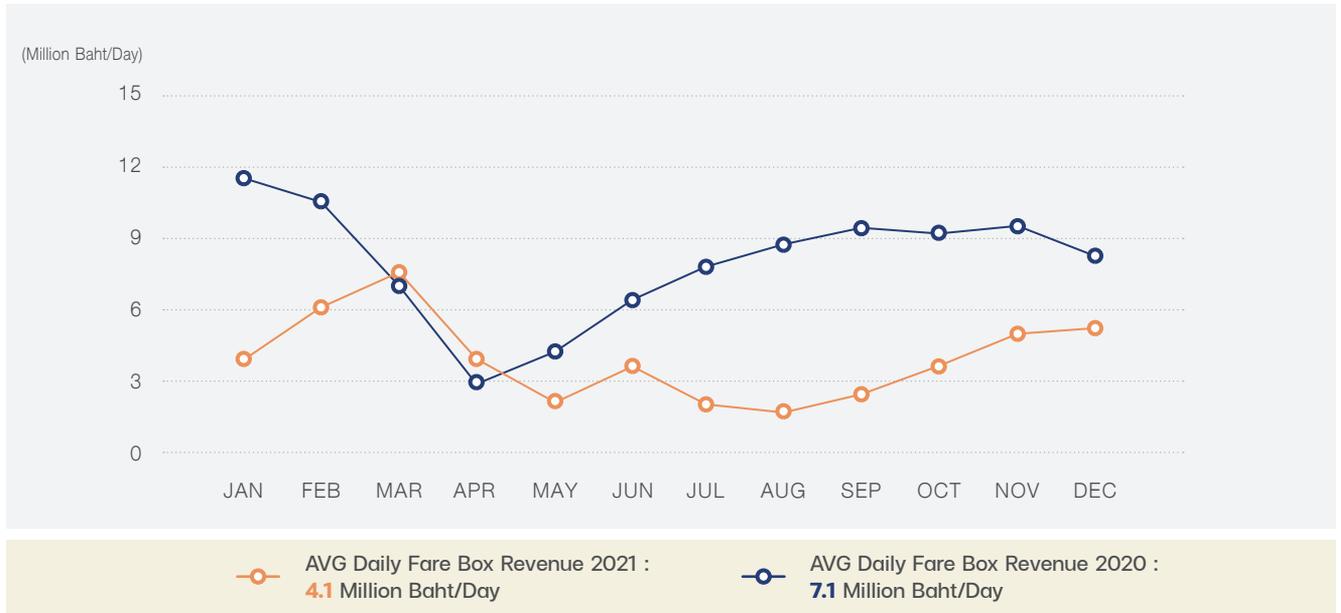
AVERAGE DAILY TRAFFIC :

Chalerm Mahanakorn, Si Rat, Udon Rattthaya and Si Rat - Outer Ring Road Expressway



AVERAGE DAILY FARE BOX REVENUE :

the MRT Chaloen Ratchamongkhon Line



AVERAGE DAILY RIDERSHIP :

the MRT Chaloen Ratchamongkhon Line





MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS



Throughout the year of 2021, the world continued to be faced with the COVID-19 outbreak from the previous year. All sectors remain united in their efforts to ensure strict adherence to various government measures. Likewise, Bangkok Expressway and Metro Public Company Limited or BEM, as an expressway and mass rapid transit service provider, was also one of the organizations which still encountered the aforesaid crisis situation, due to a considerable decrease in the traffic volume on expressways and the volume of MRT passengers, with its lowest in August. The government's relaxation of control measures, however, resulted in a rapid increase in travel volume. Moreover, the Company continues to manage and control expenses to suit this ongoing situation, with emphasis on the disease preventive measures for the safety of expressway and metro users, and meanwhile, the Company is still committed to not only taking care of staff but also society.

(Mr. Plew Trivisvavet)

Acting Chairman of the Board of Directors

In the context of service improvement, the Company has developed the toll payment system with a contactless credit or debit card based on the Europay Mastercard Visa (EMV) standard to facilitate expressway users' travelling, in collaboration with the Expressway Authority of Thailand (EXAT) and Krung Thai Bank Public Company Limited, which offers the payment service faster than toll payment with cash, as another alternative for expressway users, and to reduce the volume of vehicles accumulated in front of the toll plazas while simultaneously minimizing cash exposure during the COVID-19 outbreak situation. Other than this, the Company is preparing to launch the MRT fare payment service with EMV system by early 2022.

With regard to financial management, the Company is regarded as Southeast Asia's first private transportation company which has issued and offered for sale the Sustainability Bond worth Baht 6,000 Million, with the aims of repaying the existing liabilities and/or refinancing in the MRT Blue Line Project, which has been greatly received by investors, reflecting investors' confidence in BEM for environmentally and socially responsible business operations in the face of the COVID-19 crisis. As a result, BEM was presented with the Best Sustainability Bond Awards 2021 by The Asset, the leading financial magazine in Asia.

Despite the fact that the Company must conduct its businesses under the threat of the difficult circumstances, the Company is still striving to adhere to corporate governance in the business operations. To that end, BEM has been successively rated as a listed company with the "Excellent CG Scoring" or Five Star in Corporate Governance; and moreover, BEM was selected as one of 146 listed companies on the "Thailand Sustainability Investment" (THSI) 2021 for the fifth consecutive year, proven the comprehensive transportation service provider which is simultaneously pursuing sustainable development. BEM also has been awarded the Thailand's Top Corporate Brands 2021, as a company with the Thailand's highest brand value in the transportation and logistics sector for the

second consecutive year. All of these achievements are underpinned by the Company's commitment to operating the businesses based on corporate governance and attaining the sustainable development.

In the previous year, the Si Rat - Outer Ring Road Expressway Project (Chatuchak - Chimplee) became due for the toll rate revision, which shall be made every 5 years in accordance with the Concession Agreement, with effect from December 15, 2021. In this regard, the Company has supported the Ministry of Transport's policy to alleviate the burden of people's living costs owing to such toll rate revision, by offering for sale toll coupons at the same rate for a period of 1 year.

In respect the operating results of 2021, BEM had the net profit in the total amount of Baht 1,010 Million, a decrease from the previous year due to the impact of COVID-19. Nonetheless, BEM reaffirmed the commitment to taking care of stakeholders, especially shareholders, whereby the Board of Directors resolved to propose that the Shareholders' Meeting consider approving the dividend payment for 2021 at the rate of Baht 0.08 per share.

We would like to extend our gratitude to all shareholders, service users, both the expressway and MRT systems, counterparts, public and private agencies, along with all concerned parties, as well as executives and staff, for the great sustained support in BEM's business operations. Under any circumstances, especially during the crisis situation, please rest assured that BEM still remains committed to operating the businesses based on the good corporate governance principles, with social and environmental responsibility, in the pursuit of sustainable development, while serving an instrumental in enhancing the quality of people's travel life which will bring smiles of happiness for all expressway and MRT service users. Finally, BEM would like to encourage all Thai people to become stronger and more resilient so that we can overcome these tough situations together.



1

STRUCTURES AND OPERATIONS OF THE COMPANY GROUP

1.1 BUSINESS POLICY AND OVERVIEW

Bangkok Expressway and Metro Public Company Limited (the “Company”) is primarily engaged in the concession businesses for management and provision of the expressway and metro services, including commercial development relating to the expressway and metro systems, which are cornerstones for business expansion through future extension of the routes and the service network, both in the expressway and metro systems, thereby enabling the Company to be a leading mass rapid transit and transportation service operator in Thailand and in the region. Moreover, the Company may extend its businesses to other fast-growing businesses with good returns, such as other infrastructure projects, commercial development or real

estate development, both at home and abroad. As of December 31, 2021, the Company’s registered and paid-up capital amounted to Baht 15,285,000,000, divided into of 15,285,000,000 ordinary shares, at the par value of Baht 1 per share.

Northern Bangkok Expressway Company Limited (“NECL”), the Subsidiary, operates on the concession for construction and management of the Udon Rattaya Expressway under into the Bang Pa-in - Pak Kret Expressway Agreement, with registered capital amounting to Baht 6,000 Million, with the paid-up capital of Baht 5,250 Million. As of December 31, 2021, the Company held shares 99.99 percent in NECL .

Bangkok Metro Networks Limited (“BMN”), the Subsidiary, operates on advertising and media commercial development, as well as being a representative of the Company in managing the commercial development of the Mass Rapid Transit System and Expressway Systems in which the Company received concessions, with registered and paid up capital amounting to Baht 254 Million, As of December 31, 2021, the Company held shares 99.67 percent in BMN.



1.1.1 VISION, MISSION, GOALS, BUSINESS STRATEGIES AND BUSINESS OVERVIEW



VISION

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MISSION

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2. Improving the quality and efficiency of the modern and full-service transportation network in order to alleviate traffic problems, preserve the environment, and improve society and the country;
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1. To invest in the transportation system projects, expressway and connecting road projects, metro system projects, and related projects under the government policy for public-private partnership (PPP) in respect of infrastructure, including related business, such as, various commercial development, taking into consideration the projects which are beneficial to society and the country, with reasonable business yields;
2. To strengthen the businesses by generating revenues for continued growth, and managing costs and expenses efficiently, in order to maintain good financial standing;
3. To build relationships with stakeholders through the corporate social responsibility process and communicate with internal and external personnel about it;
4. To develop personnel ready for the provision of quality services of the expressway and metro systems;
5. To build social recognition of the corporate good image.

BUSINESS OVERVIEW OF THE COMPANY

The Company is committed to being a leading, fully-integrated transportation service provider to improve the quality of life of people in society by elevating their journey to a higher level. The Company's businesses comprise the provision of the expressway and metro services, including commercial development directly related to the main businesses. The Company's business overview is as follows:



1. EXPRESSWAY BUSINESS

The Company and NECL have obtained concessions from the Expressway Authority of Thailand ("EXAT") for construction and operation of a total of three expressways, namely, the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway, and the Udon Rattaya Expressway, per the following details:

1.1 The Si Rat Expressway

The Si Rat Expressway (Second Stage Expressway) is the first large-scale construction project in Thailand on the basis of public private partnership. This project is implemented on a BTO (Build Transfer Operate) basis, namely, the Company invested in the design, construction and operation of the Si Rat Expressway. In this regard, the title to various permanent constructions pertaining to or use of the Si Rat Expressway shall be vested in EXAT. The Company has the right to receive toll revenues as specified in the Agreement including the Commercial Development right on the roadside areas of the Expressway structures. On February 20, 2020, the Second Stage Expressway Agreement (Amendment) was signed for an extension of the concession period until October 31, 2035. The Si Rat Expressway is comprised of three Sectors, covering a total distance of 38.5 kilometers, as follows:

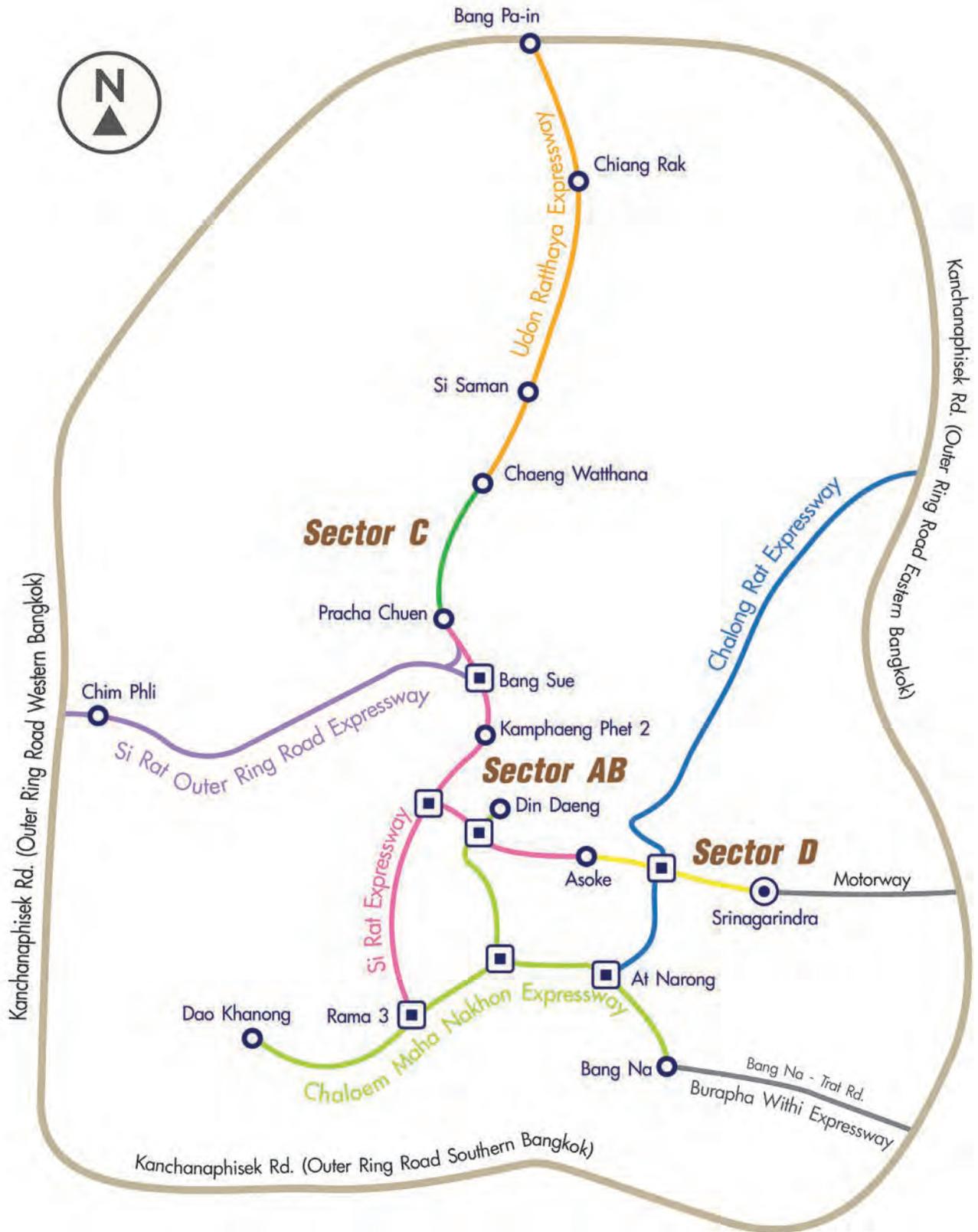
- Sector AB starts from Ratchadapisek Road southward to Payathai Interchange eastward to Rama 9 Road and from Phayathai Interchange heading southward to Bangkhlo Interchange, connecting with the Chalem Mahanakorn Expressway (First Stage Expressway);
- Sector C starts from Ratchadapisek Road northward up to Chaeng Watthana Road, connecting with the Udon Rattaya Expressway; and
- Sector D starts from Rama 9 Road eastward to end at Srinakharindra Road, connecting with the Motorway.

1.2 The Si Rat - Outer Ring Road Expressway

The Si Rat - Outer Ring Road Expressway under the Concession Agreement for Investment, Design, Construction, Operation, Service, and Maintenance of the Si Rat - Outer Ring Road Expressway Project is implemented on a BTO basis in which the Company have an exclusive right for the tolls revenue for the duration of concession period. The route starts from the Outer Ring Road (Kanjapisek Road around Mahasawat Water Treatment Plant) heading eastbound along the right of way of the existing Southern railway, crossing the Chao Phraya River around the Rama VII Bridge, ending around Bang Sue Grand Station (Chatuchak), connecting with the Si Rat Expressway around the Bus Terminal (Mo Chit 2), running down to at-grade level around Kamphaeng Phet 2 Road, and connecting northward heading to Chaeng Watthana, covering a total distance of 16.7 kilometers. The concession period is 30 years and ends on December 14, 2042.

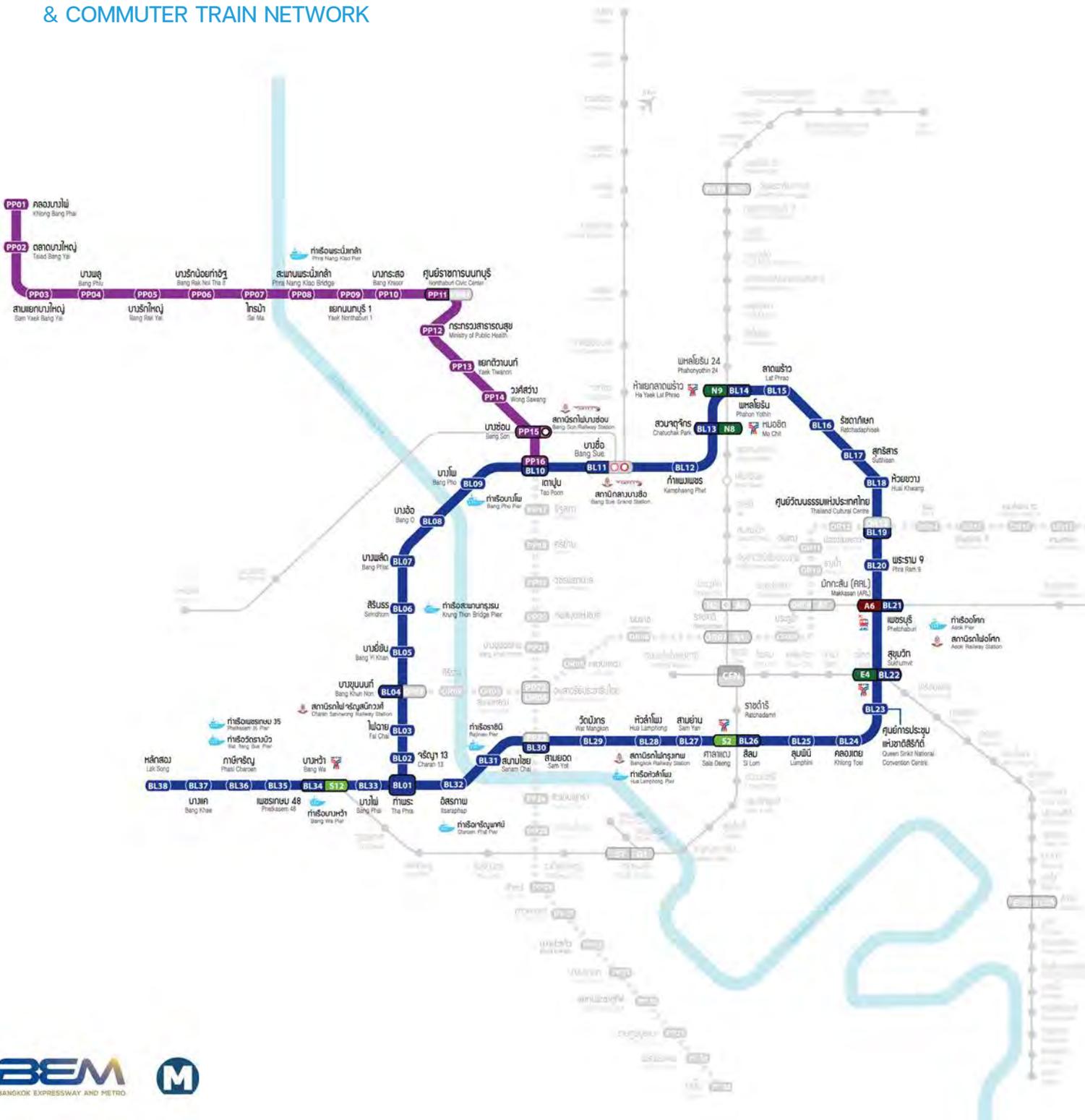
1.3 The Udon Rattaya Expressway

The Udon Rattaya Expressway (Bang Pa-in - Pak Kret Expressway), operated by NECL under the Bang Pa-in - Pak Kret Expressway Agreement is implemented on a BTO basis whereby NECL has the right to receive tolls revenue as stipulated in the Agreement including the right to commercial development in the sideroad area on the Expressway structure, with its Amendment being signed on February 20, 2020 for an extension of the concession period until October 31, 2035. The Udon Rattaya Expressway connects to the Si Rat Expressway around Chaeng Watthana Road northward heading to Bang Pa-in around Kanjanapisek Road (Western Outer Ring Road), covering a total distance of 32 kilometers.



EXPRESSWAY SYSTEM MAP

MASS RAPID TRANSIT & COMMUTER TRAIN NETWORK





2. RAIL BUSINESS

The Company has obtained concessions for the operation of two mass rapid transit rail system projects from the Mass Rapid Transit Authority of Thailand (“MRTA”), namely:

2.1 The M.R.T. Chaloe M Ratchamongkhon Line Project (MRT Blue Line)

The M.R.T. Chaloe M Ratchamongkhon Line Project (MRT Blue Line), by investment on a PPP Net Cost basis, whereby MRTA invests in all civil works and the Company shall supply, install the M&E Equipment, and provide the operation and maintenance services. The Company is entitled to farebox revenue and undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and in the trains for the concession period of 30 years from the full service opening of the entire route which is March 30, 2021. The MRT Blue Line Project comprising of:

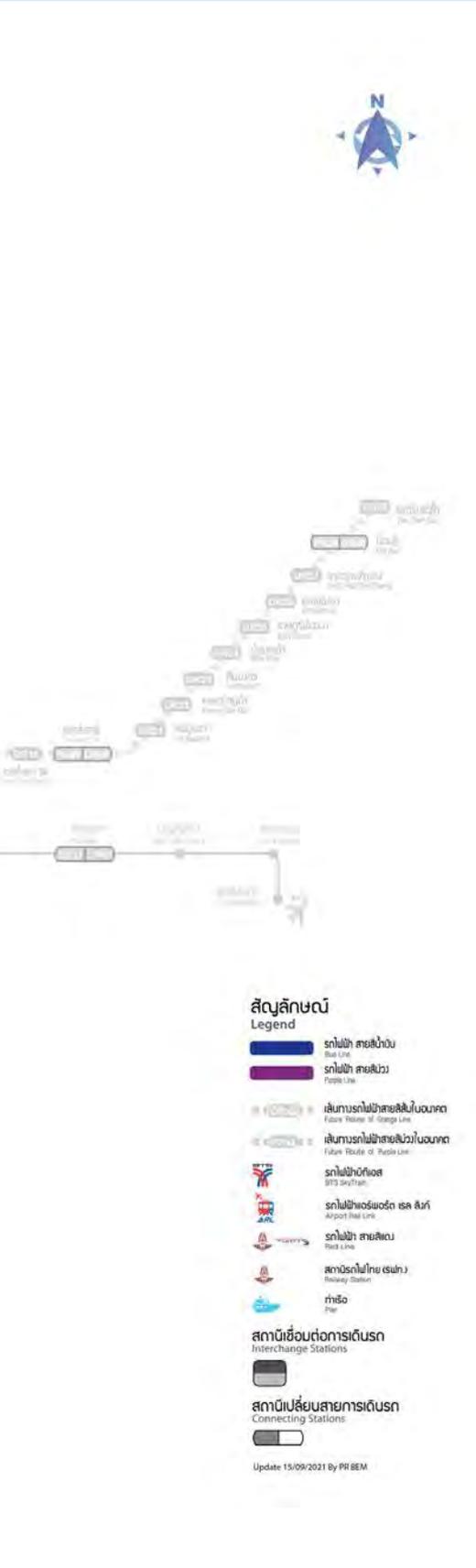
- Hua Lamphong - Bang Sue Section, which is the first underground metro project of Thailand, covering a total distance of 20 kilometers, with 18 underground stations;
- Hua Lamphong - Bang Khae Section, which is the combined structure of underground and elevated route, covering a total distance of 16 kilometers, with 11 stations; and
- Bang Sue - Tha Phra Section, which is the entire elevated route, covering a total distance of 12 kilometers, with 9 stations.

The M.R.T. Chaloe M Ratchamongkhon Line Project (MRT Blue Line) has connected to the M.R.T. Chaloe M Ratchadham Line Project (MRT Purple Line) at Tao Poon Station.

2.2 The M.R.T. Chaloe M Ratchadham Line Project (the MRT Purple Line)

The M.R.T. Chaloe M Ratchadham Line Project (the MRT Purple Line), Bang Yai - Rat Burana, Bang Yai - Bang Sue Section (Khleng Bang Phai Station - Tao Poon Station), Contract 4: Concession for Supply of M&E Systems and O&M Services, on a PPP Gross Cost basis, whereby MRTA invests in all civil works and the Company invests in the M&E Systems and the rolling stocks, as well as provides the operation and maintenance services in accordance with the specified service standards. MRTA is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make a gradual repayment of the M&E Equipment to the Company on a monthly basis for a period of 10 years, and shall engage the Company for the O&M Services throughout the concession period of 30 years from September 4, 2013.

The M.R.T. Chaloe M Ratchadham Line Project (MRT Purple Line) is an elevated metro project, for a distance of 23 kilometers, with 16 stations and a connection to the M.R.T. Chaloe M Ratchamongkhon Line Project (MRT Blue Line) at Tao Poon Station.





3. COMMERCIAL DEVELOPMENT BUSINESS





As the Company has the exclusive rights to the Commercial Development as stipulated in the related Concession Agreements, it appointed its Subsidiary, BMN, as a representative for the management of commercial developments both in the Mass Rapid Transit Project and Expressway Projects. It can be divided into 3 types of business operations as follows;

- 1) Procurement and/or production of advertising;
- 2) Lease of retail spaces; and
- 3) Provision of service and maintenance of telecommunications system equipment .

The commercial development area comprised of both self- operated and external developer terms.

1.1.2 SIGNIFICANT CHANGES AND DEVELOPMENTS

- DEC 30, 2015** ○ Bangkok Expressway Public Company Limited (“BECL”) and Bangkok Metro Public Company Limited (“BMCL”) has been amalgamated under the Public Limited Company Act to be Bangkok Expressway and Metro Public Company Limited (“BEM”) and assumed all assets, rights, duties and responsibilities of both companies by operation of law.
-
- MAR 31, 2017** ○ The Company signed the Concession Agreement for the MRT Blue Line Project with MRTA on a PPP Net Cost basis. It combines the M.R.T. Chaloem Ratchamongkhon Line Project (Hua Lamphong Station - Bang Sue Station) (Initial Blue Line), in service since 2004, and the MRT Blue Line Extension Project (Hua Lamphong Station - Lak Song Station and Bang Sue Station - Tha Phra Station), for a total distance of 48 kilometers, with 38 stations. The Company is entitled to farebox revenue and to commercial development throughout the concession period.
-
- AUG 11, 2017** ○ The Company opened for service the MRT Blue Line Extension Project, Tao Poon Station - Bang Sue Station linking the train operation among the M.R.T. Chaloem Ratchamongkhon Line (the existing MRT Blue Line), the MRT Blue Line Extension, and the M.R.T. Chalong Ratchadham Line (the MRT Purple Line) as a through operation, in order to ensure faster, more convenient and safer commute between Bangkok and its vicinity.
-
- SEP 30, 2018** ○ The Company opened for service the connection between the Si Rat - Outer Ring Road Expressway and the Si Rat Expressway heading to Chaeng Watthana in order to ensure the greater convenience for traveling to Chaeng Watthana and continuing along the Udon Rattaya Expressway.
-
- MAR 18, 2019** ○ The Extraordinary General Meeting of Shareholders No. 1/2019 resolved to grant approval for the Company and NECL to settle the disputes with EXAT by means of Amendment of the Second Stage Expressway Agreement, the Agreement for the Extension of the Second Stage Expressway System (Sector D), and the Bang Pa-in - Pak Kret Expressway Agreement.
-
- SEP 29, 2019** ○ The Company opened for commercial service the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), Section 2: Hua Lamphong Station to Lak Song Station, with 11 stations.
-
- FEB 20, 2020** ○ The Company, NECL and EXAT signed the Second Stage Expressway Agreement (Amendment) and the Bang Pa-in - Pak Kret Expressway Agreement (Amendment) for settlement of the disputes and extension of the respective concession periods until October 31, 2035.
-
- MAR 30, 2020** ○ The Company opened commercial service of the MRT Blue Line Extension Project (Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section) which make the project’s connected alignment features a Circle Line covering the central area of Bangkok, including a connection of travelling between Bangkok and Thonburi sides.
-
- NOV 14, 2020** ○ His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua and Her Majesty Queen Suthida Bajrasudhabimalalakshana graciously presided over the official opening ceremony of the M.R.T. Chaloem Ratchamongkhon Line Extension Project (MRT Blue Line) at the MRT Sanam Chai Station.

- APR 1, 2021** ○ TRIS Rating Co., Ltd. affirmed the Company's credit rating at "A-", with a "Stable" outlook.
-
- APR 28, 2021** ○ The Company offered for sale the Sustainability Bond No. 1/2021, worth Baht 6,000 Million, with a 3 to 10-year maturity, at the fixed interest rates of 1.56 percent to 3.33 percent, to repay the existing debt and/or refinance the MRT Blue Line Project, with the bonds being issued in accordance with the Sustainable Financing Framework. The Company is the first private company in Thailand and in the Southeast Asia where the sustainability bonds have been issued. As a result, the Company received the Best Sustainability Awards 2021 from "The Asset", the leading financial magazine in Asia.
-
- AUG 2, 2021** ○ The Company, in association with MRTA, opened a route linking Bang Sue Station, the MRT Blue Line Project, with Bang Sue Grand Station, the SRT Red Line Project, to ensure that people can switch between modes of transportation on a smooth, convenient, and rapid basis.
-
- AUG 27, 2021** ○ The Company received the National Green Office Award "Good Level" from the Green Office Promotion Project for 2020 of the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment.
-
- OCT 7, 2021** ○ The Company was selected as one of 146 listed companies on the Thailand Sustainability Investment (THSI) 2021 for the fifth consecutive year in the services category.
-
- OCT 28, 2021** ○ The Company was rated excellent in Good Corporate Governance (Excellent CG Scoring) or 5 stars consecutively by the Thai Institute of Directors Association (IOD) which conducted a survey on corporate governance Thai listed companies for 2021.
-
- DEC 13, 2021** ○ The Company, in association with EXAT and Krung Thai Bank, launched toll payment service with EMV Contactless (Europay Mastercard and Visa) as an alternative toll payment method in order to provide people with convenient, fast service.
-
- DEC 15, 2021** ○ The toll rates for the Si Rat - Outer Ring Road Expressway is first due for the revision in accordance with the Concession Agreement, from the rates of Baht 50/80/115 to Baht 65/105/150 for 4-wheeled / 6-wheeled to 10-wheeled/ and more than 10-wheeled vehicles, respectively. However, in order to relieve the burden of living expenses for the people, the Company sold coupons at the same rate which the expressway users can use to pay the toll until December 15, 2022.
-
- JAN 20, 2022** ○ The Company was awarded Thailand's Top Corporate Brand 2021 for the second consecutive year as a company with the highest brand value in the transportation and logistics sector in 2021, by the Faculty of Commerce and Accountancy Chulalongkorn University, at the ASEAN and Thailand's Top Corporation Brands 2021.

AWARDS OF PRIDE



The Company was rated excellent in Good Corporate Governance (Excellent CG Scoring) or 5 stars consecutively by the Thai Institute of Directors Association (IOD which conducted a survey on corporate governance Thai listed companies for 2021.



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The Company received the National Green Office Award **“Good Level”** from the Green Office Promotion Project for 2020 of the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment.

1.1.3 FUNDING OBJECTIVES

The Company has been funding by the issuance and offering of the unsubordinated and unsecured debentures enforceable under Thai law. The company has utilized the funds for the purpose in accordance with the objectives specified in the Registration Statement for Debenture Issuance. For more information, please visit the website of the Office of the Securities and Exchange Commission (“SEC Office”) at <https://market.sec.or.th>.

1.1.4 OBLIGATIONS TO WHICH THE COMPANY IS COMMITTED IN THE REGISTRATION STATEMENT FOR DEBENTURE ISSUANCE

The unsubordinated and unsecured debentures

The Company has no financial commitments for each issue of the debentures as specified in the Registration Statement for Debenture Issuance and other documents related to each issue of the debentures. In this regard, the conditions for exercising the right to redeem the debentures (Call Option) are disclosed in Clause 1.5: Issuance of Other Securities.

1.1.5 BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED (“BEM”)

Business Operation	:	Construction and management of the expressways and the rail mass rapid transit system projects, including other related businesses
Company Registration No.	:	0107558000491
Registered Capital	:	Baht 15,285 Million, divided into 15,285 Million Ordinary Shares, Baht 1 per share, Baht 15,285 Million paid up.
Head Office	:	587 Sutthisarn Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400
Telephone	:	0 2641 4611 and 0 2354 2000
Fax	:	0 2641 4610 and 0 2354 2040
Website	:	www.bemplc.co.th





1.2 NATURE OF BUSINESS OPERATIONS

1.2.1 REVENUE STRUCTURE

The Company and its subsidiaries have operated the businesses as concessionaires awarded by the government sector, as follows: 1) concessionaires for the expressway construction and operation, namely, the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway and the Udon Rattaya Expressway; 2) concessionaires for operation of the M.R.T. Chaloen Ratchamongkhon Line Project (MRT Blue Line) and the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line). Other than earnings through toll revenues, fare boxes revenue and Mass Rapid transit Operating service fees, the Company has also earned from the commercial development business pursuant to the relevant Concession Agreements. Currently, the revenue structure of the Company and its subsidiaries is set forth below.

Total Revenue Structure	Operated by	Percentage of Shareholding of the Company	Consolidated Financial Information					
			2021		2020		2019	
			Million Baht	%	Million Baht	%	Million Baht	%
Revenue From Expressway Business			6,450	56.2 %	8,145	56.9 %	10,302	60.6 %
Toll revenue	Company		5,490	47.8 %	6,942	48.5 %	8,852	52.1 %
Toll revenue	Subsidiary	99.99 %	960	8.4 %	1,203	8.4 %	1,450	8.5 %
Revenue from rail business			3,454	30.1 %	4,520	31.5 %	5,022	29.5 %
Farebox revenue and metro operation service charges	Company		3,454	30.1 %	4,520	31.5 %	5,022	29.5 %
Revenue from commercial development business			822	7.2 %	825	5.8 %	783	4.6 %
Commercial development revenue	Company		745	6.5 %	724	5.1 %	720	4.2 %
Commercial development revenue	Subsidiary	99.67 %	77	0.7 %	101	0.7 %	63	0.4 %
Other income ⁽¹⁾			755	6.5 %	833	5.8 %	888 ⁽²⁾	5.2 %
Total revenues ⁽³⁾			11,481	100 %	14,323	100 %	16,995	100 %

Remarks: ⁽¹⁾ Other income, the main item is dividend income and interest income.

⁽²⁾ In 2019, there is profit from sale of investment Baht 181 Million included in the other income.

⁽³⁾ Exclusive of gains on reclassification of investments in 2019 in total of Baht 3,409 Million.

1.2.2 PRODUCT INFORMATION

1. EXPRESSWAY BUSINESS

(1) Nature of Services

The Company and NECL, its subsidiaries, have been granted concessions for construction and operation of a total of three expressways, namely, the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway, and the Udon Rattthaya Expressway, as per the following details:

- **The Si Rat Expressway (Sectors AB, C and D)**

In the operation of the Si Rat Expressway (Second Stage Expressway), the Company has a duty to collect toll fees, carry out rescue, and maintenance of the Si Rat Expressway. The Company is entitled to receive toll revenues as follows:

- The Company receives a 40% revenue sharing and EXAT receives a 60% revenue sharing from the Chalerm Mahanakorn Expressway (First Stage Expressway) (Bang Na-Din Daeng-Dao Khanong);
- The Company receives a 40% revenue sharing and EXAT receives a 60% revenue sharing from the Si Rat Expressway (Sector AB);
- The Company receives all toll revenues of the Si Rat Expressway (Sector C and Sector D); and
- The Chalerm Mahanakorn Expressway and the Si Rat Expressway are subject to a revision to their respective toll rates every 10 years at the rate of Baht 10 as specified in the Agreements, with their next revision taking place on September 1, 2028.

- **The Si Rat - Outer Ring Road Expressway**

In the operation of the Si Rat - Outer Ring Road Expressway, the Company has the duties to carry out operation, service provision, and maintenance of the expressway, including toll collection, in consideration of the right to receive toll revenue and other revenues (if any).

The project is an elevated six-traffic lane expressway, for a distance of 16.7 kilometers, with 9 toll plazas, with its route starting from the Outer Ring Road (Kanjapisek Road around Mahasawat Water Treatment Plant) heading eastbound along the right of way of the existing Southern railway, crossing the Chao Phraya River around the Rama VII Bridge, ending around Bang Sue Grand Station (Chatuchak), connecting with the Si Rat Expressway and running down to at-grade level around Kamphaeng Phet 2 Road. Moreover, the Company opened the connection with the northern part of the Si Rat Expressway (heading to Chaeng Watthana) for service in order to ensure the greater convenience in travelling to Chaeng Watthana and continuing along the Udon Rattthaya Expressway.

In the operation of this project, the Company is responsible for collecting tolls and shall have the right to receive all toll revenue and other revenues (if any) throughout the concession period, whereby the toll rates and revisions shall be agreed upon in the Agreement.

The Si Rat - Outer Ring Road Expressway is subject to a revision to its toll rates every 5 years from the date of service operation of the project at the rates of Baht 15, Baht 25 and Baht 35 for four-wheeled vehicles, six-wheeled to ten-wheeled vehicles; and more than ten-wheeled vehicles, respectively, as specified in the Agreement, with the first revision taking place on December 15, 2021. To ease the burden of the expressway users, the Company has sold a one-year coupon for the former toll rates (December 15, 2021 to December 15, 2022).

- **The Udon Rattthaya Expressway**

In the operation of the Udon Rattthaya Expressway (Bang Pa-in - Pak Kret Expressway) operated by NECL, which is responsible for collection of tolls, rescue, including maintenance of the Udon Rattthaya Expressway. All toll revenues in respect of the Udon Rattthaya Expressway shall belong to NECL.

The Udon Rattthaya Expressway comprises 2 Stages, namely, Stage 1, Chaeng Watthana - Chiang Rak, and Stage 2, Chiang Rak - Bang Sai, connecting to the Si Rat Expressway around Chaeng Watthana Road, covering a total distance of 32 kilometers. As for the inbound route, the expressway users shall pay tolls at the booths around the on-ramps of the expressway while in respect of the outbound route, expressway users shall pay tolls at the off-ramps of the expressway.

The Udon Rattthaya Expressway is subject to a revision to its toll rates on the 1st day of November every 10 years at the rate of Baht 10 as specified in the Agreement, with the next revision taking place on November 1, 2028.

The details of the expressway linking networks in Bangkok and its vicinity are as follows:

Expressway	Length (km.)	Constructed and Operated by
1. Chaleram Mahanakorn Expressway (First Stage Expressway) (Bang Na - Din Daeng - Dao Khanong)	27.1	EXAT
2. Si Rat Expressway (Second Stage Expressway) - Urban Network (Sector AB) (Prachachuen - Phayathai - Bangkhlo - Asoke) - Suburban Network (Sector C) (Prachachuen - Chaeng Watthana) - Suburban Network (Sector D) (Rama 9 - Srinagarindra)	38.5	Company
3. Udon Rattaya Expressway (Bang Pa-in - Pak Kret)	32.0	NECL
4. Si Rat - Outer Ring Road Expressway	16.7	Company
5. Uttaraphimuk Elevated Way (Don Muang Tollway)	28.0	Don Muang Tollway Public Company Limited
6. Chalong Rat Expressway including its Extension (Ramindra - At Narong and Ramindra - Outer Ring Road)	32.9	EXAT
7. Burapha Withi Expressway (Bang Na - Chonburi)	55	EXAT
8. Kanjanapisek Expressway (Bang Pli - Suksawad) and Highway No. 37 (Suksawad - Bang Khun Thien Section) including a connecting road to Bhumibol Bridge 1 and Bhumibol Bridge 2	37.8	EXAT
Total Length	268.0	

Toll Revenue Sharing

Expressway	Length (km.)	Revenue Sharing (Company : EXAT)
Chalerm Mahanakorn Expressway		
Din Daeng - Port	8.9	40 : 60
Bang Na - Port	7.9	
Port - Dao Khanong	10.3	
Si Rat Expressway		
Sector AB: (Rama 9 - Ratchadapisek) (Phayathai - Bangkhlo)	21.8	40 : 60
Sector C: (Ratchadapisek - Chaeng Watthana)	8.0	100 : 0
Sector D: (Rama 9 - Srinagarindra)	8.7	100 : 0
Si Rat - Outer Ring Road Expressway	16.7	100 : 0
Udon Rattaya Expressway		(NECL : EXAT)
Chaeng Watthana - Chiang Rak	22.0	100 : 0
Chiang Rak - Bang Sai	10.0	

Toll Rates

Expressway/Toll Plaza	Toll Rates (Baht/Trip)		
	4 wheels	6-10 wheels	More than 10 wheels
Chalerm Mahanakorn Expressway (First Stage Expressway)	50	75	110
Except:			
At Narong 1 Toll Plaza (to Bang Na)	25 ⁽¹⁾	50 ⁽¹⁾	85 ⁽¹⁾
Si Rat Expressway (Sector AB) (Second Stage Expressway)	50	75	110
Except:			
Prachachuen Toll Plaza (inbound)	60 ⁽²⁾	90 ⁽²⁾	140 ⁽²⁾
Prachachuen Toll Plaza (outbound)	10 ⁽²⁾	15 ⁽²⁾	30 ⁽²⁾
Si Rat Expressway (Sector C) (Second Stage Expressway)	15	20	35
Prachachuen 1 Toll Plaza (from Prachachuen Road)	} 15	} 20	} 35
Prachachuen 2 Toll Plaza (to Prachachuen Road)			
Ngam Wong Wan 1 Toll Plaza (outbound)			
Ngam Wong Wan 2 Toll Plaza (inbound)			
Si Rat Expressway (Sector D)	25	55	75
Si Rat - Outer Ring Road Expressway	55/65 ⁽³⁾	80/105 ⁽³⁾	115/150 ⁽³⁾
Udon Rattaya Expressway	45	100	150
Except:			
Muang Thong Thani Toll Plaza	35/45 ⁽⁴⁾	90/100 ⁽⁴⁾	140/150 ⁽⁴⁾
Bang Pa-in Toll Plaza	55	120	180

Remarks: ⁽¹⁾ These rates are after deduction of Baht 25 discount for all types of vehicles (from July 1, 2021 to December 31, 2022).

⁽²⁾ In case of the motorists' service use of the Second Stage Expressway continuing from Sector AB to Sector C at Prachachuen Toll Plaza (outbound) or from Sector C to Sector AB at Prachachuen Toll Plaza (inbound), the tolls of the Second Stage Expressway for all types of vehicles will be offered at a discount of Baht 5 throughout the contract period.

⁽³⁾ The toll rates were revised on December 15, 2021. However, the former toll rates are still applied for the motorists who pay tolls with coupons (from December 15, 2021 to December 15, 2022).

⁽⁴⁾ From January 1, 2022 onwards, motorists must pay the tolls at the full rates due to the end of the Baht 10 discount promotion on December 31, 2021. However, the Company has launched a new promotion for offering a Baht 10 discount coupon for the motorists who pay tolls with coupons, to which the toll rates with a Baht 10 discount will be applied (from January 1, 2022 to December 31, 2022).

(2) Innovation Development

- **Policy on Research and Development, as well as Innovative Development in Process of Goods/Services**
 - **Geographic Information System (GIS)**

To maximize efficiency in expressway engineering management, the Company has developed the Geographic Information System (GIS) with modern technology to ensure information display under the Management Information System (MIS), such as Mobile Mapping System (MMS) and Laser Point Cloud in the form of Web-based Application, which is an advanced tool in maintaining the expressway service standard to stay at an appropriate level to the expressway users' satisfaction, in terms of speed, convenience and safety in conformity with various requirements and laws, which have been applied to the Pavement & Structure Management Systems and has been further used in the Safety Management System on the expressways in order to analyze the cause of accidents under engineering principles and provide additional equipment / improve the routes to ensure the safety in all environments with greater efficiency. In this regard, the Company's research and innovation knowledge development is carried out in collaboration with consulting firms which at least have met the ISO 9001 quality assessment criteria, thereby resulting in the Company's development of accurate and reliable innovation and knowledge that can be used in decision-making in expressway engineering management with maximum efficiency.

In the context of research and development, the Company has established a specialized research unit in the field of engineering and has integrated continuous cooperation with academic departments, including leading higher education institutions, as well as academic cooperation with the national institute of scientific and technological research which allows the Company to have an academic network with faculty of teachers, researchers and experts, thereby contributing to exchange and development of the body of knowledge which is accurate, reliable and up-to-date all the times. As a result, the Company is able to continuously produce research in expressway engineering published in national academic works and has always provided special lectures in the university semesters to extend the exchange of expressway engineering research studies for further organization and public development.

- **Advanced Traffic Management System (ATMS)**

ATMS is a software which connects traffic facilities on expressways to display the facilities' operating status, namely, Variable Message Signs (VMS) Mandatory Signs (MS), Emergency Telephone Systems (ETS) and Closed Circuit Television Cameras (CCTV), installed additionally by the Company in the entire area of the Udon Rattaya Expressway in 2021, as well as ATMS, integrated with the Intelligent Video Analytics (IVA) equipped at the off-ramps and on-ramps without toll plazas in order to detect vehicles which are not permitted to use expressways or driving in the wrong direction, whether people or animals, in which case, to provide alerts for any detected insecurity incident on expressways. In addition, ATMS can display a schematic map by showing shades of color to indicate the active traffic conditions in that area, with the device symbol showing on the schematic map, based on the actual position on expressways, to ensure the greater convenience, speed and efficiency in monitoring and management of traffic conditions. ATMS has been installed within the communication room, Udon Rattaya Expressway Control Center, in 2021 and planned to be installed on the Si Rat Expressway in 2022.

Intelligent Video Analytic (IVA) and Alert at Udon Rattaya Expressway Control Center





- EMV Toll Payment System Development

The Company, in association with EXAT and Krung Thai Bank, developed a contactless-enabled credit or debit card toll payment system based on Euro Master Visa (EMV) standards to facilitate the expressway users' travel to make it

more conveniently and rapidly, as a brand-new option for the expressway users, simply by tapping and paying tolls with one international standard card, both debit and credit cards of all banks embedded with contactless payment symbol, for which wireless technology (Contactless) will be employed in a short range, as well as to fulfill the requirements in the modern lifestyle that reduces use and touch of cash to minimize the risk of the spread of COVID-19 while simultaneously serving as an international standard payment format.

This system has already been officially launched for service on the Si Rat - Outer Ring Road Expressway and the Udon Rattthaya Expressway in January 2021 and on the Si Rat Expressway in April 2021.

Furthermore, the Company has developed a contactless credit or debit card toll payment model based on the EMV standard into the Tap and Go system, allowing each expressway user to execute a transaction by oneself without the service by toll booth attendants, known as the EMV Toll Collection Machine (TCM). When a motorist has successfully tapped an EMV-based credit or debit card, the automatic lane barrier will open for passing through, where the motorist may choose to print out a toll receipt by pushing a button at the toll booth. Currently, this system is in trial on the third lane at Bang Sue 1 Toll Plaza, the Si Rat - Outer Ring Road Expressway, and on the third lane at the inbound Chiang Rak Toll Plaza, the Udon Rattthaya Expressway.

EMV Toll Collection Machine (TCM) Lane



- Digital Technology

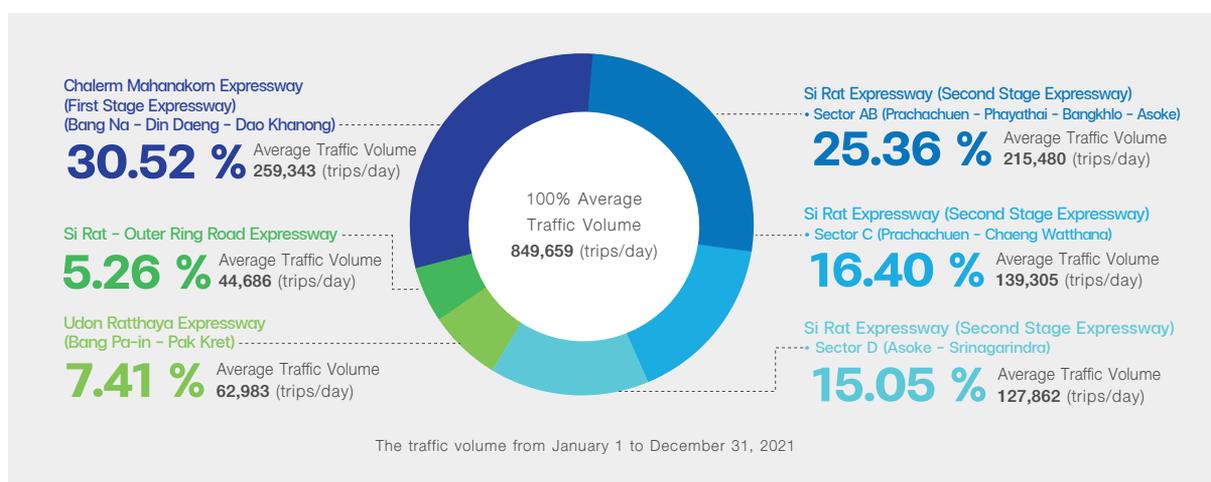
In 2021, the Company developed and extended the application of digital technology to accomplish the improved modernity and convenience for motorists by developing and using a rescue system for assistance on expressways via Smartphone and to help reduce the amount of paper (paperless), ensure the greater safety of motorists and staff due to reduced service time, by recording and identifying the accident point connected to GPS, making it convenient to forward to relevant agencies in a PDF format and to facilitate retrospective searching. In this case, the data will be kept as Big Data, which will then be analyzed and presented as a Dashboard of road accident data in order to assess and find a solution to reduction of accidents through the engineering process with further expressway improvement.

Furthermore, the Company gives priority to the application of AI (Artificial Intelligence) to assist with work in order to reduce expenses, reduce repetitive work time of staff in order for them to focus on more important tasks, such as applying RPA (Robotic Process Automation) in the procurement process.

(3) Marketing and Competition of Expressway Business

• Customer Characteristics and Target Customers of Expressway Business

Target customers of the expressway users refer to those motorists who desire a convenient and rapid transportation or who desire to shorten the traveling distance to their destinations as well as to avoid the traffic congestion along the congested normal roads in Bangkok and its vicinity. Customer groups are distributed according to travel destination, residences, workplaces. Thus, the expressway income does not rely on any particular group of customers. The customers by the types of vehicles using the expressways may be divided into four-wheeled vehicles; six-wheeled to ten-wheeled vehicles; and more than ten-wheeled vehicles, which in 2021, accounted for 98.20 percent, 1.45 percent, and 0.35 percent, respectively. The traffic volume from January 1 to December 31, 2021, using the expressways can be described by areas as follows:



• Marketing Strategies of Expressway Business

○ Marketing Strategies of Expressway Business

The marketing highlight is that the Si Rat Expressway is designed to respond to the transportation needs through the expressway network which connects to and covers major areas in Bangkok, whether from the Chalem Mahanakorn Expressway and the Si Rat Expressway, as well as the Chalong Rat Expressway (Ramindra-At Narong) which cover the areas from the North to the South and from the West to the East of Bangkok. Motorists may use the expressway to connect to the Burapha Withi Expressway (Bang Na-Chonburi), and the Chalem Mahanakorn Expressway and the Chalong Rat Expressway, thereby rendering the service of the expressway systems to become more complete for users to reach their destinations more conveniently and rapidly than using at-grade roads.

The Si Rat - Outer Ring Road Expressway, a route connecting between the Bangkok-Thonburi sides, has its route crossing the Chao Phraya River at the Rama VII Bridge, continuing along in parallel to the Southern railway via the districts of Bang Phlat, Bang Bamru, Taling Chan, passing Ratchaphruek Road, and ending at the Outer Ring Road (the West), thereby enabling motorists to conveniently and rapidly commute from and to Bangkok-Thonburi sides. On the inbound side, there is a connection point from the Boromarajonani overpass in Taling Chan area to the Si Rat - Outer Ring Road Expressway, at Km.5 + 200, and a connection point with the Si Rat Expressway in Mo Chit area, Chatuchak, turning right southward to Phaya Thai - Silom and turning left to the northern part of the Si Rat Expressway, to ensure the greater convenience in the motorists' travelling to Ratchadaphisek, Prachachuen, Chaeng Watthana, and Bang Pa-in, by using the Udon Rattthaya Expressway.

The marketing disadvantage is the physical limitation which prevents the release of traffic around the expressway exits during the peak hours, which depends on the traffic on at-grade roads, representing an uncertain factor beyond the Company's control. However, the Company continuously coordinates with traffic police in police stations of such areas, including linking video signal from CCTVs on the expressways to police stations of such areas, to provide assistance in releasing and facilitating traffic flow in the expressway systems by improving various on- and off-ramps for motorists to save time and facilitate motorists with more convenience and better quality of living in their commute in the downtown. Motorists should then appreciate these benefits over the price factor.

o **Service and Product Strategies of Expressway Business**

- The prime location and connections to major roads in the city allow the expressway network to respond to the transportation needs of motorists to reach their desired destinations. In this regard, the Company has improved the quality of the routes and its services, which will be integrated as key strategies to efficiently accommodate the traffic volume flowing in the system.
- The feasibility study on improvement of the on- and off-ramps of the expressways serves as another measure to facilitate the traveling and to continually maintain the quality of the expressways in terms of engineering safety to meet international standards.
- The study on new routes in response to the urbanization in the future, particularly in Bangkok, as well as the study on traveling behavior of motorists, are conducted to prepare for the expansion of the scope of the expressway services, and serve well as additional channels of services in response to needs of the motorists in the future.
- The communication channels on traffic information via Smart Traffic and Variable Message Signs (VMS) are added to keep motorists informed of the traffic conditions on expressways, as well as suggesting routes on expressways for more convenience and rapidity.
- The expressway guide signs on at-grade main roads and alleys in Bangkok and its vicinity have been continuously improved so as to facilitate motorists' travelling to destinations and boost their confidence to access and use the expressways. To this effect, the emphasis is given to provision of information relating to landmarks adjacent to the on- and off-ramps of the expressways via the websites, various public relations media, including social media to ensure greater convenience and rapidity in travelling of customers, as the expressway users.
- The public relations activities about the Si Rat - Outer Ring Road Expressway are undertaken at the places located along the Si Rat - Outer Ring Road Expressways and Chaeng Watthana in order to guide the expressway users on how to use the routes, and to accept needs and suggestions directly from the expressway users. Moreover, the Company has given directions to restaurants and tourist attractions via the Facebook fan page: Club Chim Tiew, with a great number of followers.
- The study was carried out to develop the contactless EMV card toll collection system in the toll lanes without toll booth attendants in the form of Tab and Go (EMV Toll Collection Machine), as a semi-automatic toll lane, allowing motorists to complete their own transactions by themselves and an automatic barrier will then open for passing through, with the trial service starting as a pilot lane each on the Si Rat - Outer Ring Road Expressway and the Udon Rattaya Expressway.
- The study was carried out to develop the barrier-free expressway toll collection system with Multi Lane Free Flow, whereby the Company installed test lanes at two toll plazas and employed the automatic License Plate Recognition (LPR) to check the passage, which was completed in August 2021.
- The Easy Pass lanes without toll booths were created, due to the fact that the toll booths were positioned to hide motorists' view of the price tags and toll booth attendants needed to walk through the toll lanes, and to avert accidents of car crashes into a toll booth. Its implementation started as a pilot project on one lane in November 2021, with its plan to expand in 2022.

- The study project to analyze the origin-destination on expressways (Origin-Destination (OD)) was carried out to use the obtained information to improve the service by applying the data from the License Plate Recognition (LPR), which uses the origin information from the passage at the toll booth and the destination information from additional CCTV cameras installed at the expressway exit points, with the implementation starting on the Si Rat - Outer Ring Road Expressway in 2021.
- The project of installation of closed-circuit television cameras (CCTV) to cover the 100% expressway area was carried out in order to monitor active incidents on the expressways and to provide prompt assistance to motorists in case they need assistance, with 227 CCTV cameras being installed on the Udon Rattaya Expressway in 2021, and additional 408 CCTV cameras were planned to install on the Si Rat Expressway in 2022.
- The project of installation of Intelligent Video Analytic (IVA) at the off-ramp and on-ramp areas without toll plazas was carried out to detect vehicles, people or animals entering the expressway or driving in the wrong direction, in order to prevent accidents on the expressway. The system was installed on the Udon Rattaya Expressway in 2021, with a plan to install on the Si Rat Expressway in 2022.

o **Price Strategies of Expressway Business**

- Toll rates, including the calculation for revisions of the toll rates, are agreed upon and specified in the Agreements ahead of time. It is mutually agreed that the rates are considered reasonable and based on the feasibility study for the investment of each project.
- The Company continues to provide a discount on tolls on certain routes for a limited period of time to attract motorists to increasingly use the expressway services, especially such routes with connections between the expressway systems, e.g., At Narong 1 Toll Plaza (from the Chalong Rat Expressway to enter the Chalerm Mahanakorn Expressway around Bang Na), and Muang Thong Thani Toll Plaza of the Udon Rattaya Expressway, which the Company, together with EXAT, continued to provide the discount.

o **Distribution Strategies and Distribution Channels of Expressway Business**

Payment of Tolls

The service users can pay tolls in three ways: by cash, pay through the Electronic Toll Collection System (Easy Pass) or pay by EMV card.

- Users of the Chalerm Mahanakorn Expressway and the Si Rat Expressway may choose to use the expressway services from various on- and off-ramps covering major areas in Bangkok throughout the total distance of 65.6 kilometers. Expressway users shall pay tolls at the on-ramps of toll plazas, totaling 52 locations, 20 toll plazas of the Chalerm Mahanakorn Expressway (e.g., Din Daeng, Bang Na, Dao Khanong, Sukhumvit, Rama 4 Toll Plazas, etc.) and 32 toll plazas of the Si Rat Expressway (e.g., Asoke, Rama 9, Srinagarindra, Yommaraj, Surawong, Hua Lamphong, Khlong Prapa, Yan Phahon Yothin, Prachachuen, Rama 3, etc.).
- Users of the Udon Rattaya Expressway which connects to the expressway system towards the North of Bangkok has a total distance of 32 kilometers, with 10 toll plazas, shall pay tolls at the on-ramps for the inbound direction and at the off-ramps for the outbound direction. There are five on-ramps and five off-ramps.
- Users of the Si Rat - Outer Ring Road Expressway which connects to the Si Rat Expressway System towards the West of Bangkok has a total distance of 16.7 kilometers, with 9 toll plazas, shall pay tolls at the on-ramps.

the Electronic Toll Collection system in the toll collection has facilitated and speeded up the toll payment at the front of the Toll Plazas during the peak hours, as well as accommodating the increasing traffic volume in the future. Currently, there are Easy Pass users representing approximately 49.34 percent.

Moreover, the Company, in collaboration with EXAT and the Department of Highways, carried out integration between the Easy Pass system and the M-Pass system to enable the service users to pay tolls with only one pass for seven expressway routes and two of the Intercity Motorways (Motorways) of the Department of Highways.

- **Industrial Outlook and Competition of Expressway Business**

The Company is a private expressway operator which operates the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway, and the Udon Rattaya Expressway, covering a total distance of 87.56 kilometers in Bangkok and its vicinity. In the meantime, there is another private sector company providing the same expressway service, with its total service distance of 28 kilometers. When compared to BEM, the other private company is one-third the size of the Company. The Company and the other private company's networks, on the other hand, have a connecting point above Makkasan on the Si Rat Expressway, allowing motorists of both networks to travel in a seamless, convenient, rapid and safe manner. In addition, both networks have their respective routes which connect to the north of Bangkok and run parallel to each other from the north of Bangkok into the center of Bangkok, giving the service users a travel mode choice. Physically, BEM's network is more connected to other expressways than that of the other private company, thereby allowing for comprehensive travel connections.

In 2021, Thailand had been affected by the situation of the spread of COVID-19 for the second year in a row, which had extensive effects across all sectors. Entrepreneurs were affected by the inability of people to live a normal life, and moreover, a state of emergency was declared, measures to encourage individuals to work from home (WFH) were adopted, online education was conducted by schools and universities, and people and tourists refrained from travelling, thereby periodically having an impact on various businesses. Similarly, the expressway business was also impacted by the announcement of numerous measures; as a result, the traffic volume on the expressways was lower than usual, and people refrained from traveling during lockdown and shutdown measures, not to mention the fact that people scrimped and saved, including buying and selling cars, which continued to decline. According to a study of statistics on auto sales at the Motor Expo, held in December every year, it was found that before the epidemic of COVID-19, 44,189 vehicles were sold in 2018; 37,489 vehicles were sold in 2019; 33,753 vehicles were sold in 2020, and 31,583 vehicles were sold in 2021 (Prachachat Business Newspaper, December 2021), which continued to decline. However, in spite of a decrease in auto purchase-sale; a decrease in traffic volumes on expressways, during the peak of the outbreak of COVID-19, using expressways was the safest method to travel, people reduced their use of public transportation, thereby increasing their use of private vehicles for travel. As a result, after the government began to gradually loosen various measures, there was high traffic on both roads and expressways, especially during the 4th quarter of the year, people started traveling more due to the continually declining situation of the COVID-19 outbreak, including the government's relaxation of various government measures, resulting in an increase in traffic on the expressways, but not to the normal condition prior to the outbreak of COVID-19. Therefore, the traffic volume on the expressways still continued to reduce in 2021 owing to the impact of the COVID-19, which lasted longer than 2020. However, even in the hardship situation, the Company has improved the traffic lanes on the expressways, upgraded and expanded the EASY PASS lanes and introduced the toll collection system with VISA PAYWAVE and MASTER CARD PAY PASS credit card / debit card, simply by using a credit / debit card from any bank to pay tolls at the cash counter by lowering the car glass and tapping the card at the contactless reader to instantly pay, for convenience, rapidity, safety, reducing touch, while also serving as another convenient option for expressway users. In this regard, it is currently in service on all of the five expressway routes.

(4) Procurement of Products and Services of Expressway Business

- **Nature of Procurement of Products of Expressway Business**

EXAT is an authority responsible for the construction of expressways to provide service for convenient, rapid and safe traffic, as well as to mitigate traffic problems. EXAT invited interested parties to submit investment proposals; the Company then conducted a feasibility study and submitted its proposals for investment in projects with appropriate returns and conditions.

The expressway projects under the Second Stage Expressway Agreement, the Bang Pa-in - Pak Kret Expressway Agreement, and the Concession Agreement for the Si Rat - Outer Ring Road Expressway Project are implemented on a BTO basis. According to the essence of the Agreements, EXAT shall have the duty to determine the characteristics of the expressways, expressway routes and areas to be used for construction and arrange for land expropriation for delivery to the Company for construction within the time specified in the Agreements. Thereafter, the Company would carry out construction in accordance with the designs approved by EXAT, subject to the supervision of the quality of construction work by EXAT's Consulting Engineer, Independent Certification Engineer, and Independent Design Checker. Upon completion of the construction, the Independent Certification Engineer shall inspect the work and issue Certificate of Completion to evidence that the construction work is completed in accordance with the standards.

The Company thoroughly studied the feasibility of the expressway and intercity motorway projects to jointly invest in government affairs in accordance with the government's operational plans, including the Kathu-Patong Expressway Project in Phuket Province of EXAT to accommodate a greater number of tourists and population, and the project of improvement the expressway system in the inner city of Bangkok to solve the current traffic congestion problem.

The motorway projects of the Department of Highways under the Intercity Motorway Development Master Plan 2017-2036 consist of the Elevated Intercity Motorway Project: Western Bangkok Outer Ring Road, Bang Khun Thian - Bang Bua Thong Section (M9), the Intercity Motorway Project: Uttaraphimuk Elevated Way Extension, Rangsit - Bang Pa-in Section (M5), the Intercity Motorway Project: Bang Khun Thien - Pak Tho Section (M82), the Intercity Motorway Project: Nakhon Pathom - Cha Am Section (M8), and the Elevated Intercity Motorway Project, Srinakarin - Suvarnabhumi Section (M7), to ensure a complete transportation and logistics system in the future.

2. RAIL BUSINESS

(1) Nature of Services

The Company has been granted concessions for two mass rapid transit rail system projects by the Mass Rapid Transit Authority of Thailand ("MRTA"), which are the M.R.T. Chaloem Ratchamongkhon Line Project and the M.R.T. Chalong Ratchadham Line Project, as per the following details:

- **The M.R.T. Chaloem Ratchamongkhon Line Project** ("MRT Blue Line Project"): The Company shall be responsible for supply, installation, testing and commissioning of M&E Equipment, provision of services to ensure a continuous operation as a single network (Through Operation), and the Company is entitled to farebox revenue as well as undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and trains throughout the concession period of 30 years from the date of the service opening of the entire route. In this regard, the M.R.T. Chaloem Ratchamongkhon Line Project is consisted of Hua Lamphong-Bang Sue Section (the existing MRT Blue Line), and Hua Lamphong-Bang Khae Section, Bang Sue-Tha Phra Section (the MRT Blue Line Extension), per the details below:
 - **Hua Lamphong - Bang Sue Section (the existing MRT Blue Line)**, the first underground metro system of Thailand, covering the distance of 20 kilometers, with 18 stations, which was opened for service on July 3, 2004. The Company is entitled to farebox revenue as well as undertaking activities and commercial development, including advertising, leasing space and telecommunications services in the metro stations and trains.

- **Hua Lamphong - Bang Khae Section and Bang Sue - Tha Phra Section (the MRT Blue Line Extension)**, the underground and elevated route, with a total of 20 stations, divided into 4 underground stations and 16 elevated stations, having a connection with the M.R.T. Chaloem Ratchamongkhon Line Project (the existing MRT Blue Line) at Hua Lamphong Station and Bang Sue Station, as well as connecting with the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) at Tao Poon Station. The Company is responsible for investment, supply, installation, testing and commissioning of the M&E Equipment, and trial running, including the O&M Services by ensuring the continuous train operation (Through Operation). The supply and installation of the M&E Equipment for opening for service are divided into three sections, namely:
 - Section 1: Bang Sue Station - Tao Poon Station, officially opened for service on August 11, 2017;
 - Section 2: Hua Lamphong Station - Lak Song Station, officially opened for service on September 29, 2019;
 - Section 3: Tao Poon Station - Tha Phra Station, officially opened for service on March 30, 2020 thereby ensuring the train operation in the MRT Blue Line Project as a single network (Through Operation), by having Tha Phra Station as the main common and interchange station, which would enable the passengers to change their destinations from Tha Phra Station to travel to the suburban area westward via Bang Phai Station to Lak Song Station or travel to the urban area via Itsaraphap Station to Hua Lamphong Station, as well as travelling to Tao Poon Station connecting with the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line).

In this regard, the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) was opened for full service, covering the total distance of 48 kilometers, with 38 stations and a total of 54 trains available for service every day from 06.00 - 24.00 hours.

- **The M.R.T. Chalong Ratchadham Line Project (“MRT Purple Line Project”), Bang Yai - Bang Sue Section (Khlung Bang Phai Station - Tao Poon Station)**, covering a distance of 23 kilometers, with a total of 16 elevated stations, where Tao Poon Station (Interchange Station) is located as an interchange station with Bang Sue Station of the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line), which would make it possible for passengers’ interchange from the MRT Purple Line to the MRT Blue Line at Tao Poon Station, which in the future, would be connected with the MRT Purple Line Extension (Tao Poon - Rat Burana Section). The Company has been granted the concession for investment, the supply of M&E Systems and O&M Services, on a PPP Gross Cost basis. That is, MRTA invests in all civil works and the Company invests in the M&E Systems and the rolling stocks, including provision of the O&M Services in accordance with the service standards defined in the conditions of the Agreement. MRTA is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make gradual repayment for the M&E Systems to the Company on a monthly basis for a period of 10 years, and engage the Company to conduct the operation and maintenance throughout the concession period of 30 years from September 4, 2013.

There is a total of 21 trains available every day without holiday, from 5.30 - 24.00 hours on Mondays - Fridays, and from 6.00 - 24.00 hours on Saturdays - Sundays and public holidays.

Projects	Chaloem Ratchamongkhon Line (MRT Blue Line)		Chalong Ratchadham Line (MRT Purple Line)
	(Hua Lamphong Station - Bang Sue Station)	(Hua Lamphong Station - Lak Song Station and Bang Sue Station - Tha Phra Station)	(Khlung Bang Phai Station - Tao Poon Station)
Concession Type	PPP Net Cost	PPP Net Cost	PPP Gross Cost
Concession Period	33 years (2017-2050)		30 years (2013-2043)
Number of Stations	18 stations	20 stations	16 stations
Distance	20 kilometers	28 kilometers	23 kilometers

- **Revenue**

The Company's revenues from the rail business can be divided into two categories, comprising farebox revenue and revenue from O&M services.

- **Farebox revenue**

Pursuant to the Concession Agreement for the MRT Blue Line Project between the Company and MRTA, the Company has the right to operate the train and collect farebox revenue and undertake commercial development throughout the concession period. The Company is obliged to make payment of remuneration from fares and commercial development to MRTA at the rates as mentioned in the Concession Agreement.

The fare rates of the metro as of the commencement date would be in accordance with the basic reference fare rates in force at the time of the revenue service commencement date. Under the Concession Agreement, the reference fare rates would be adjusted every 24 months based on the actual changes of the Bangkok Non-Food Consumer Price Index compared to the basic reference fare rates.

- **Revenue from O&M Services**

The Company receives service fees for train operation and maintenance from the MRT Purple Line Project Concession Agreement, Contract 4, Concession for Supply of M&E Systems and O&M Services (Klong Bang Yai Station-Tao Poon Station), Phase 2 (for a period of approximately 27 years). The service opening commenced on August 6, 2016.

(2) Innovation Development

- **Policy on Research and Development, as well as Innovative Development in Process of Services or Business Model**

Nowadays, innovation and technology are starting to play a key role in our daily lives, as a result, the behavior of electric train system users has changed, with a greater emphasis on convenience, safety, and speed of operation. Therefore, the current payment system has clearly shifted to electronic payment, also known as Digital Payment, thereby resulting in a decreased cash expenditure and the transition to a cashless society. Therefore, the Company has developed a payment innovation in order that it will be applied in conjunction with the payment of metro fares in order to provide passengers with additional payment options and to meet their needs. Over the previous period, the following actions were taken by the Company:

- Payment of fares with Contactless EMV cards, resulting from collaboration between the Company and Krung Thai Bank in developing a contactless credit or debit card payment system under EMV standards to facilitate passengers.
- Top-up for tickets via TrueMoney Wallet and Krungthai NEXT applications is to facilitate passengers' use of smartphones with TrueMoney Wallet and Krungthai NEXT applications to top up tickets instead of cash payment, together with the offered spending promotions from the use of the applications.
- Payment of fares via the government-sponsored application "Bao Tang" is to stimulate the economy and relieve those impacted by the COVID-19 outbreak, for example, "Half-Half Co-Payment", "Section 33 We Love Each Other" or "We Win" projects.
- Payment of fares with a state welfare card, a government assistance program for low-income people, who will be entitled to obtain benefits from public transportation.

(3) Marketing and Competition of Rail Business

3.1 Customer Characteristics and Target Customers

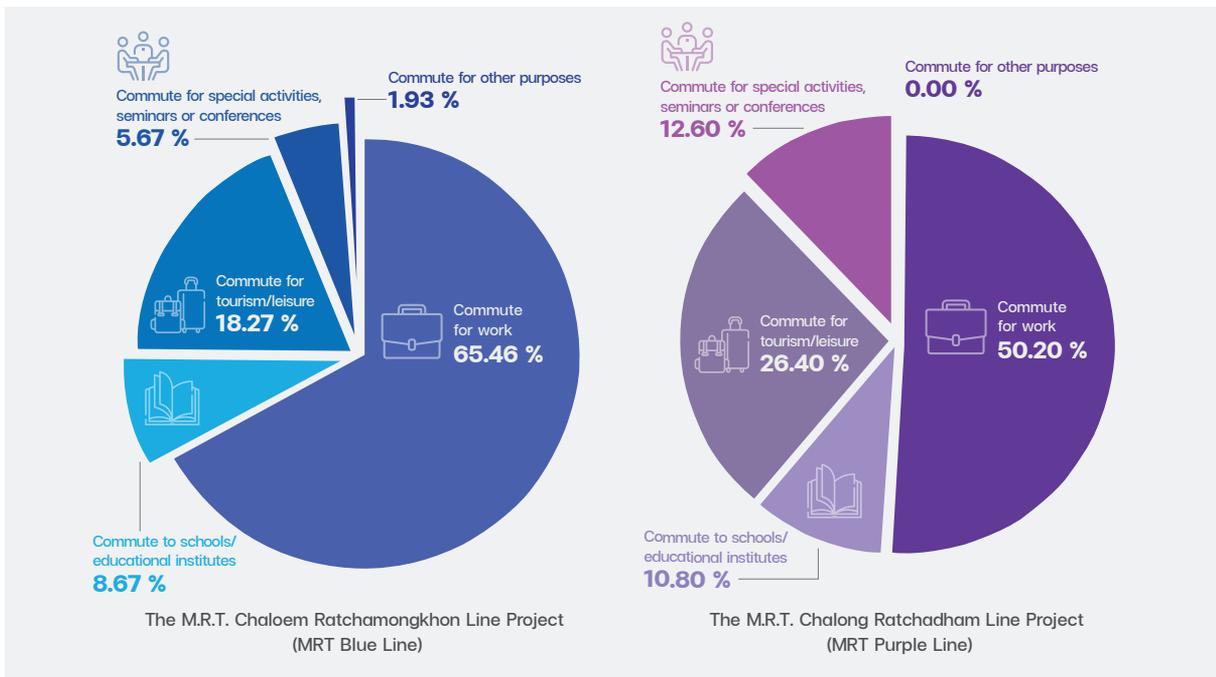
Target customers of metro users are a group of persons who reside near the service routes and a group of persons who do not live around the routes but have a destination on the service routes.

The number of passengers using the metro service from January 1, 2021 to December 31, 2021 was classified as follows:



In this regard, primary factors in choosing the metro system which influence service users' travel behaviors are time-saving and convenient travel, with their intended destinations mostly for labor, education, or tourism.

Information from the passenger satisfaction survey in 2021 can be categorized by the following purposes of travel:



Source : Information collected by the Company.

3.2 Marketing Strategies of Rail Business

- o The Company gives top priority to service quality with its commitment to safe, convenient, fast, reliable, and punctual services in order to be the best travel alternative to suit service users' needs. As a result of the COVID-19 outbreak, the Company focuses on restoring passengers' confidence in the metro system through safety measures such as ensuring that all staff are 100% fully vaccinated and heightening measures for cleanliness, disinfectant spraying, as well as mandating the services users to wear face masks at all times within the stations, refrain from talking, and maintain the social distancing when using the service. To ensure the greater convenience in travel, the service route covers central business districts and residential areas, by connecting to other mass rapid transit networks and landmarks.

3.3 Industrial Outlook and Competition of Rail Business

Mass Rapid Transit Systems in Bangkok and its Vicinity

Bangkok is a large capital city with a dense population, and is the economic center, giving rise to a rate of rapid growth and expansion. As a result, Bangkok today has been extremely facing traffic problems, which have accumulated over many years, along with an ongoing increase in population, number of cars, motorcycles and other vehicles in Bangkok every year, without any declining tendency, not to mention the demand for travel of the people which was rising, while the traffic areas and public transport systems could not adequately accommodate such rising demand, which was considered the main problem occurring in other densely populated capital cities worldwide. From such problems, the government has therefore implemented a policy to emphasize the development of various public transport networks to resolve the traffic problems in order to accommodate an increase in the population, including the economic growth of the country.

Despite the fact that the ongoing situation of the spread of COVID-19 has resulted in a decrease in the volume of travel and the use of public transportation, the development of public transportation must continue.

In this regard, travelling by residents in Bangkok can be divided into two modes of transport systems, namely, personal transport system and public transport system.

1. Personal Transport System

As a result of the people's residences in Bangkok and its vicinity which are spread all over, traveling, including the growing number of highly-paid population, coupled with the inadequacy of the existing mass transit systems, travelling by personal cars then remains popular, if comparing the expenses spent on traveling with personal cars, together with service quality and safety, as a result, the use of a personal car is still necessary and comfortable to travel. On the contrary, the expansion of traffic areas in Bangkok still remains limited and inadequate to accommodate the increasing number of vehicles.

2. Public Transport System

As a result of the traffic congestion problem, particularly during peak hours, and the growth of the real estate projects, particularly the real estate surrounding the electric train routes, consumers' demand for the public transportation system of certain types was considerably high, especially for the electric train system which was significantly expanding by reason of change in the urban people's behaviors of selection of residences and travelling by significantly focusing attention to convenience, rapidity, punctuality and shortened time in travelling.

○ Buses

At present, there are various types of public buses for service at different service rates, but the number of public buses in service in Bangkok and its vicinity remained inadequate, owing to the fact that a certain number of buses were undergoing improvement and rearrangement of bus routes was made, even if there was currently a total of 7,575 buses in service, and more than 2,241 passenger vans which became enormously popular among the people because of provision of its convenient and rapid service in travelling. Furthermore, the Bangkok Mass Transit Authority (BMTA) has also applied technologies, i.e., E-Ticket system or payment via QR-Code Mobile Banking, to improve its service quality to ensure conformity to the current situations affected by the outbreak of COVID-19, in which people have to use the bus service in new normal, therefore, adjusted the operating guidelines under the concept of "New BMTA New Normal" which passengers have to always wear medical face masks while on board, clean their hands with gel hand sanitizers, ensure a social distancing, and scan QR Code via Thai Chana Application, for the greater safety in the services. But due to the continuing traffic congestion problems on roads as whole, especially during the morning peak hours from 6.30-8.30 hrs. and the evening peaks hours from 16.30-18.30 hrs. and during the rainy season, travelling is then time-consuming. (Source: Bangkok Mass Transit Authority, information as at November 2021)

- **Trains**

Over the past years, the government sector has implemented a policy to provide relief assistance to the low-income earners to enable them to spend through the government welfare smart cards, whereby the cardholders can use the service for both public service buses (bus), passenger vehicles served by The Transport Co., Ltd., trains and electric trains, free of charge in the amount not exceeding Baht 500 baht per system per month. However, the train system service still lacks the facilities and the safety for the service users, due to the fact that the conditions of the trains in use are currently not comfortable, not to the service users' satisfaction, and it takes quite a long time to travel, let alone the limited routes not covering the entire city. As a result, the State Railway of Thailand (SRT) expedited additional dual track rail system construction projects on many routes in order to enhance the capacity and accommodate the maintenance of the rising number of trains and to develop the Thai railway system in accordance with Thailand's transportation infrastructure development strategy. In this regard, the SRT's train service is not considered the Company's direct competitor owing to different service routes, namely, the SRT mainly aims to provide the service to suburban areas.

- **BTS**

BTS Skytrain is Thailand's first mass rapid transit rail system on the elevated dual tracks in separate directions, with its first service opening on December 5, 1999 on 2 lines, namely, Sukhumvit Line and Silom Line. On December 16, 2020, the line extension project of Mo Chit - Saphan Mai - Khu Khot Section was opened to the public for a fare-free trial for all stations, and the Saint Louis Station was opened for service on February 8, 2021. Then, it has the total service distance of 68 km., with 60 stations. As such, traveling by BTS Skytrain is another option which facilitates commuters' travelling, and with the BTS Skytrain's route running to the heart of the city, it then becomes massively popular among people, and it also contributes to a factor in continuously increasing the service users.

- **ARL**

The Suvarnabhumi Airport Rail Link or Airport Rail Link is a special mass rapid transit rail system project, as part of the projects for construction of suburban rail system, operated by SRT. Presently, Asia Era One Co., Ltd. is the operator of the train operations. It is an electric train project which supports traveling from the eastern suburbs to the middle of the city by connecting travel and transporting passengers from the Suvarnabhumi Airport to Bangkok at Phaya Thai Station which is an electric train system with both underground and elevated structures, totaling 8 stations, with a distance of 28.6 kilometers. It was opened for service on August 23, 2010.

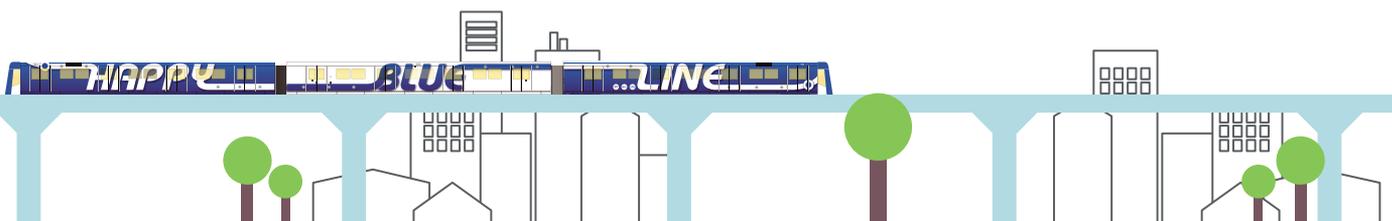
As a result of an ongoing increase in a number of the public transport system service users, it reflected the change in travel behavior of residents in Bangkok and its vicinity from using personal car to use the public transport system. This indicated the development in terms of convenience, rapidity, safety and the extended coverage areas of travelling to ensure transit in the through operation system at present. However, owing to the traffic congestion, air and noise pollution, and potential accidents, the transit rail system is then regarded as a significant milestone for change and development of the mass rapid transit systems in Bangkok and its vicinity, which will help alleviate traffic problems, ensure safe, convenient, rapid and shortened journeys of service users, and result in a positive effect on the economy and environment. The electric train system offers a key travelling mode of choice which improves the quality of life of urban commuters while simultaneously minimizing fuel and national resource use.

3.4 Industrial Outlook and Government Policy of Rail Business

Thailand's overall economic outlook in 2021 expanded by 1.6 percent improved from previous year decline of 6.2 in 2020. The major supporting factors were contributed to the improvement in domestic demand, revival of the tourism businesses, investments driven by the Government policies and the continuous expansion of exports, in which the value expanded by 18.8% from the previous year, together with the relaxation of the lockdown measures and better direction of controlling the COVID-19 pandemic situation in the late 2021. This included the progress in the procurement and distribution of vaccines to the people, allowing the government to relax various control measures within the country, together with opening the country to foreign tourists from November 1, 2021, which resulted in an improved economic activity.

Despite the fact that the present trend of COVID-19 infections is continuing on the rise, the people's access to vaccines in the country has continued to be high. Thailand currently has the total vaccinated people of 104,444,169 doses (Source: Information as at December 31, 2021: Centre for COVID 19 Situation Administration (CCSA)), with the vaccines helping reduce the infection and death tolls, while also bolstering the people's confidence in their daily lives. As a result, the government started to relax the lockdown measures and issued various remedial measures to help stimulate the economy (Source: Office of the National Economic and Social Development Council: The Bank of Thailand).

In terms of transportation system development, the Ministry of Transport has strived to develop the transportation systems of Thailand to serve as a mechanism to drive the country's economy to achieve balanced and stable growth. The infrastructure development for transportation would cover areas across the country, accommodate constant transportation and travelling which are connected together in a variety of modes, whether it be primary, secondary, and sub-tours, within the area, especially the mass transit system by electric train, one of the strategic plans for transportation development and as another important instrumental in driving the economy and reviving the country. In this regard, the M.R.T. Chalerm Ratchamongkhon Line (MRT Blue Line Extension), Hua Lamphong - Bang Khae Section (Lak Song Station), and Bang Sue - Tha Phra Section, one of the projects to which the government gives priority, was officially opened for the entire route on March 30, 2020; therefore, the MRT Blue Line Project is able to provide complete train service for the entire route as the single network (Through Operation). As such, traffic problems in Bangkok, which is the urban center of all activities, will be alleviated, and it will then become the network center for transportation and travel. In addition, the MRT Green Line Extension Project, Mo Chit - Saphan Mai - Khu Khot Section, was opened to the public for a fare-free trial on December 16, 2020. Moreover, there are many major electric train projects which have been pushed forward, namely, the MRT Purple Line (South), Tao Poon - Rat Burana (Kanchanaphisek Outer Ring Road); the MRT Brown Line, Khae Rai - Lam Sali (Bueng Kum); the MRT Grey Line, Section 1: Watcharaphon - Thong Lor; the MRT Grey Line, Section 2: Phra Ram 3 - Tha Phra; and the Bangna-Suvarnabhumi Line Project. Currently, they are in the process of proposing a budget and study of project details, including investment format, whereby all the projects have been accelerated by the government sector to ensure compliance with the strategic plans for infrastructure development for transportation of the country, in order to build an electric train network which covers more areas, and it serves as another option for traveling which can be scheduled, remains convenient, rapid and safe, as well as helping diminish environmental problems, improving the quality of life of the people in the pursuit of the country's continual development and sustainability.



Progress of Development of the Mass Rapid Transit Systems under the Government Policy

Project	Current Status of Project
<p>SRT Red Line</p>	<p>Bang Sue-Rang Sit, with 10 stations, for a distance of 26.30 km.</p> <ul style="list-style-type: none"> - It was opened to the public for a fare-free trial on August 8, 2021. - It was officially opened for service on November 29, 2021. <p>Bang Sue-Taling Chan, with 3 stations, for a distance of 15 km.</p> <ul style="list-style-type: none"> - It was opened to the public for a fare-free trial on August 8, 2021. - It was officially opened for service on November 29, 2021. <p>Taling Chan-Salaya, with 4 stations, for a distance of 14.8 km.</p> <ul style="list-style-type: none"> - The project was already approved on February 26, 2019. - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP). <p>Taling Chan-Siriraj, with 3 stations, for a distance of 5.7 km.</p> <ul style="list-style-type: none"> - The project was already approved by the Council of Ministers on March 5, 2019. - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP). <p>Hua Lamphong-Mahachai, with 17 stations, for a distance of 37 km.</p> <ul style="list-style-type: none"> - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP). <p>Rangsit-Thammasat University (Rangsit Campus), with 4 stations, for a distance of 8.84 km.</p> <ul style="list-style-type: none"> - The project was already approved on February 26, 2019. - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP).
<p>MRT Brown Line</p>	<p>Khae Rai - Lam Sali (Bueng Kum), with 20 stations, for a distance of 22.1 km.</p> <ul style="list-style-type: none"> - January 3, 2019, the Commission for the Management of Land Traffic System Management Committee (CMLT) resolved to assign the OTP to incorporate the development plan for the MRT Brown Line Project, Khae Rai-Lam Sali (Bueng Kum) into the Mass Rapid Transit Master Plan in Bangkok Metropolitan and its vicinity, Phase 1. - Currently, the project is under consideration for the Environmental Impact Assessment Report (EIA). - The bidding is expected to begin in 2023 and the construction is expected to begin in 2024.
<p>MRT Purple Line Extension</p>	<p>Tao Poon-Rat Burana (Kanchanaphisek Outer Ring Road), with 17 stations, for a distance of 23.6 km.</p> <ul style="list-style-type: none"> - On July 25, 2017, the Council of Ministers passed a resolution granting approval for MRTA to carry out the construction of civil works for the MRT Purple Line Project, Tao Poon-Rat Burana Section (Kanchanaphisek Outer Ring Road). - Currently, the project is in the process of selling tender documents, TOR to select the qualified private sectors for civil construction. It is expected that the bidding will be completed to acquire the winning bidder in the first quarter of 2022.

Project	Current Status of Project
MRT Grey Line	<p>Watcharaphon - Thong Lor, with 39 stations, for a distance of 39.91 km.</p> <ul style="list-style-type: none"> - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP).
Bangna-Suvarnabhumi Line Project	<p>Phase 1: Bang Na - Thana City Section, with 12 stations, for a distance of 14.6 km.</p> <p>Phase 2: Thana City-Suvarnabhumi (South Terminal), with 2 stations, for a distance of 5.1 km.</p> <ul style="list-style-type: none"> - Currently, SRT is in the process of studying the details of format of the Public-Private Partnerships (PPP).

(4) Procurement of Products and Services of Rail Business

The Company has performed procurement of travel ticket manufacturers through bidding to recruit and engage ticket manufacturers in a transparent, fair, and verifiable manner, with it mainly engaging domestic manufacturers in the past.

The Company has offered a variety of train ticket formats to match the usage and to be another convenient and cost-effective travel option for service users, namely:

- Single Journey Token: a smart, contactless coin used for a single travel
- Stored Value Card: a smart card which can be stored and topped up value for multiple rides
 - Adult Card available for the general public, with regular fare rates according to distance;
 - Student Card available for students (aged not over 23 years old), will be offered a 10% discount off the normal fare rates on all trips;
 - Elder Card available for the elderly (aged 60 years old or more), will be offered a 50% discount off the normal fare rate on all trips;
 - Child Card available for children aged under 14 years old with a height of 91-120 cm., will be offered a 50% discount off the normal fare rate on all trips;
 - Business Travel Card and Business Alliance Card, which are issued in collaboration with business alliances, and are used in the same way as Adult Card.

Moreover, the Company has offered a variety of journey ticket promotions to fulfill the demands of passengers for MRT PLUS and MRT tickets for the general public as another alternative mode of transportation, as follows:



Category	Details		
	Number of Trips	Price (Baht)	Average/Trip
PL Adult Pass	15 trips	450	Baht 30
	25 trips	700	Baht 28
	40 trips	1,040	Baht 26
	50 trips	1,100	Baht 22
	60 trips	1,200	Baht 20
BL Adult Pass	15 trips	450	Baht 30
	25 trips	700	Baht 28
	40 trips	1,040	Baht 26
	50 trips	1,250	Baht 25
ML Adult Pass	15 trips	810	Baht 54
	25 trips	1,300	Baht 52
	40 trips	2,000	Baht 50
	50 trips	2,250	Baht 45

3. COMMERCIAL DEVELOPMENT BUSINESS

(1) Nature of Services and Innovation Development

- **Commercial Development Relating to Expressway System**

As for the commercial development in the area of the expressway system, the Company and one of its subsidiaries, namely, NECL, allowed private entities and individuals to take on the lease of spaces for commercial operation, as follows:

- o Installation of Intelligent Traffic Signs and Advertising Boards

Private entities were allowed to install Intelligent Traffic Signs on the main routes and in front of toll plazas, and install advertising boards in various areas, such as, in front of toll plazas, toll booths, expressway columns, and expressway barriers, etc.

- o Retail Areas around Toll Plazas

Private entities and individuals were allowed to take on the lease of retail areas for providing service to expressway service users around Prachachuen, Srinagarindra, and Bang Pa-in Toll Plazas.

- o Other Business Operations

Private entities were allowed to use the expressway areas for installation of 3G signal distribution devices, etc.

- **Commercial Development Relating to Metro System**

The Company has appointed its subsidiary, namely, BMN, as the sole management representative in the commercial development of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), per the following details:

- o **Procurement and/or Production of Advertising Media**

The selection of an effective communication format to impact one's spending behavior is a critical consideration for marketers to plan their suitable advertising media selection. The most significant issue is building customer awareness through various advertising media, channels and platforms which have been used by service users. Consumers will be able to receive advertising materials from brands, both online and offline, in particular, online channels cannot be disregarded nowadays because consumers' behavior in the digital age allow them to receive news via social media as the number one priority through various platforms. Therefore, BMN, as the Company's representative, will study and analyze the areas in the metro stations to lay out the pattern and develop advertising media which are suitable for passengers' service behaviors and to achieve the efficiency of communication as much as possible, by co-working with the agencies or the owners of the goods and services to present

innovations, static and dynamic technologies, more creativity to create an image, awareness, storytelling through advertising media in metro trains to ensure the metro service users' awareness and engagement with the products and services. Other than this, BMN is also looking for its partners to provide variety to the use of advertising media in metro trains, such as co-organizing marketing activities in the stations with product and service owners, and changing the advertising media format from static to dynamic photos at key locations in the stations.

Furthermore, to keep up with social and technological changes, BMN has implemented O2O marketing integration (Offline to Online) with advertising media such as shopping via QR Code installed on advertising media both in the stations and on the trains, using AR Wall technology to take photos and videos with those who are interested to keep as a souvenir, and using Google Lens technology to allow passengers to scan to see three-dimensional images and view related information through their mobile phones, or connection of two modes of medial (O2O Marketing).

The expansion of the target groups not inside the train stations is another policy that the Company has simultaneously pursued, due to the potential of the areas in the train stations which can expand the customer base (Eye Ball) to the roadways, thereby bringing value to the Company's customers, for example, the development of advertising media in the areas on the train stations such as installation of large digital screens at Silom Station, one of the most significant landmarks in Bangkok (Central Business District), including the integration of adjacent areas to have good impact on products and services such as train station roofs, passenger elevators or empty spaces on the stations, to be able create advertising media which can catch the eyes of the people on the roads so that it becomes a Landmark Media which can greatly communicate to people on the areas outside the train station (Out of Station).

In 2022, a plan is prepared to ensure additional digital media transformation in the Prime Area, open to development of creativities under the safety management of electric train regulations, expand media space to the upper-train stations such as media on ventilation buildings or ventilation shafts, including the development of new media, and improve the media space in Queen Sirikit National Convention Center Station to accommodate the opening of Queen Sirikit National Convention Center in the third quarter of 2022.

o **Lease of Retail Areas in Stations**

In 2021, there was not only the lease of space within the Metro Mall of the underground stations, consisting of Kamphaeng Phet Station, Chatuchak Park Station, Phahon Yothin Station, Lat Phrao Station, Thailand Cultural Centre, Phra Ram 9 Station, Phetchaburi Station, Sukhumvit Station, and Khlong Toei Station, but also study and expansion of the scope of space lease and services to areas outside the Metro Mall, unpaid areas, and other stations, including expansion of service areas to the elevated stations. Customers can receive services in the form of short- or long-term space leases depending on the set forth conditions and terms. Furthermore, the Company selects the types of products and services to meet the needs of passengers and suit their way of using metro service, with each area being divided into appropriate zones, and in the meanwhile, the Company has also renovated the area in the Metro Mall as a stopover or an appointment point for service users.

In addition to expanding the service area, the Company has also integrated the store space model and the advertising space together by analyzing Customer Journey and building their awareness through advertising media within the stations, creating experience or engagement with customers to ensure their decision to purchase goods and services within the Metro Mall in a comprehensive way within the metro station areas.

o **Provision of Service and Maintenance of Telecommunications System Equipment**

The Company has installed telecommunication equipment which receive and transmit mobile phone signals at all 22 underground stations in accordance with the government sector which has granted licenses to private operators, and improved device efficiency to accommodate 5G technology to ensure the customers' enhanced experience of receiving 4G and 5G services on a continuous basis.

(2) Marketing and Competition of Commercial Development Business

• Marketing Policy of Commercial Development Business

○ Advertising Media

The advertising media of the metro are classified as Out of Home Media and Transit Media, which are present in the daily lives of residents in Bangkok because they can be perceived from travelling; therefore, in this advertising media business, the marketing policy emphasizes advertising that is beneficial to the product and service owners through the development of advertising media to enable it to create personal perception to the extent of viral perception, promoting the image, access to passenger groups, building a relationship and experience to have a positive effect on goods and services; and also prioritizes the long-term partnership, supporting customers' business, both directly and indirectly, in order to ensure customers' achievement of their goals or objectives.

The Company's advertising media are mostly purchased from agencies rather than from the group of good and service owners, with agencies outnumbering good and service owners by 60:40 this year. The top five groups of goods and services which have employed advertising media in the MRT trains include telecommunications group (mobile phone signal), followed by credit/debit card group, beverage group, website group, and consumer product group, respectively.

○ Lease of Retail Areas in MRT Stations

The marketing policy for lease of retail areas in MRT stations continues to focus on the selection of products and services which can meet the requirements of MRT service users, provide convenience and enhance the image of MRT projects in providing safe services to passengers and all related parties.

There are a variety of sizes of the spaces for lease and services available within the MRT stations. Furthermore, the Company focuses on enhancing facilities for passengers to utilize as a waiting area or stopover or a meeting spot during their journeys (Rest Area), which brings benefit not only to passengers, but also to the stores in the Metro Mall.

In addition to the aforementioned policy, the Company also places a high value on relationship development and marketing collaboration between the Company and its customers, as it strengthens the long-term stability and security of the business operations in 2021. To that purpose, the Company has collaborated on marketing with Citi Bank, J&T Express, and others.

○ Provision of Service and Maintenance of Telecommunications Equipment

The Company puts emphasis on the improved efficiency and maintenance of telecommunications equipment for the benefit of passengers when they come to use the service in the MRT projects. In this part, the Company's customers consist of AIS, DTAC, TRUE MOVE H, TOT and CAT, which is the group of licensees of the Office of the National Broadcasting and Telecommunications Commission (Office of the NBTC) which have provided mobile phone services, including both the public and private sectors.

• Industrial Outlook and Competition of Business Development Business

○ Advertising Media

Owing to the situation of the outbreak of COVID-19, the announcement of various government measures to contain or prevent the spread of the virus has had an enormous impact on the country's economy, and entrepreneurs have adapted to such situations, such as reducing management budgets, public relations budgets, not to mention the implementation of a policy allowing staff to work from home, thereby resulting in a dramatic decrease in MRT passengers compared to that in the period prior to the outbreak of COVID-19.

The aforesaid situation is detrimental to the advertising industry condition. In the period of January-October 2021, the top five affected media with the highest rate of decline, compared to the same period of 2020, were cinema media, mobile media, newspapers, magazines, and radio, a reduction by more than 10 percent as compared to that of the previous year, with cinema media having the largest decline rate at 31 percent while mobile media at 24 percent. As a result, the usage of budgets for advertising and public relations in the MRT trains has been impacted accordingly.

Nevertheless, in the fourth quarter of the year, it started to show better signs from easing the measures, by allowing the opening of shops and services, canceling the lockdown measures, and opening the country, including the steadily increasing vaccination rate, especially in Bangkok and its vicinities, and goods and service owners began to use their budgets for advertising, public relations to boost sales at the end of the year. Yet, the COVID-19 outbreak is still present, goods and service owners are therefore forced to change their strategies to plan for short-term budget usage instead of long-term budget use.

Throughout 2021, the Company did emphasize assisting and supporting its advertising media customers to ensure they could get through such crises such as time postponement or extension of advertising media publicity and media organization at a special price, among other things, to strengthen good relationships with business alliances in the long run.

o **Space for Lease and Services**

The space for lease and services is another business which has been impacted by the outbreak of COVID-19, thereby forcing retail shops to temporarily close their services according to each period specified by the government announcement, which includes retail shops available in the MRT stations; and additionally, the aforementioned situation has resulted in a substantial change in consumers' shopping behavior. This is due to the fact that consumers need to avoid entering heavily crowded areas by switching to an online shopping service or a delivery service rather than physically using the service in shopping malls.

The Company has implemented various supportive and remedial measures to ensure that tenants and service providers can continue to run their businesses through the crises, including waiving rent and service charges, lowering rent and service charges, expanding space to allow tenants to distribute their products more widely, and so forth. These measures will help greatly strengthen the business relationships between the Company and its business alliances.

During the fourth quarter of the year, the government had loosened its mandatory measures, and as such, people began to live outdoors more, along with their adaptation to a New Normal way of life, resulting in a gradual increase in the number of metro users compared to that in the previous period, and a rise in the purchase of goods and services in the MRT stations. As a result, revenue from sales of goods and services began to improve, with people leasing space for activities to sell products and services at the end of the year.

In 2022, the Company anticipates a steady increase in MRT service users, which will benefit entrepreneurs in the lease and service spaces. Furthermore, the Company plans to develop and improve the Metro Mall area at Phahon Yothin Station, as well as preparing to open the Metro Mall area at Queen Sirikit National Convention Center Station, by giving priority to services that meet the needs of service users, ensure convenience, a good image and safety, while maintaining good relationships with the entrepreneurs operating in the area to become the Company's long-term business alliances and partners.

(3) Procurement of Products and Services of Business Development Business

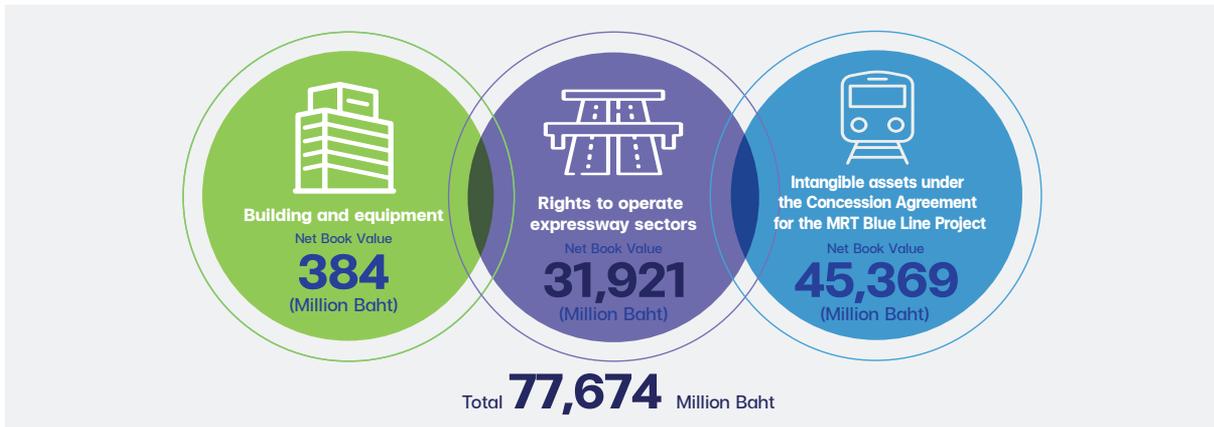
The Company has obtained the concession from MRTA for operation and commercial development in the M.R.T. Chaloe Ratchamongkhon Line Project (MRT Blue Line), with the Company conducting commercial development in respect of 1) procurement and/or production of advertising media of various forms; 2) lease of retail areas in the MRT stations; 3) provision of service and maintenance of telecommunications system equipment; and 4) other commercial activities, by authorizing BMN as the Company's representative to conduct the commercial development.

With respect to the expressways, the Company and NECL have allowed private entities and individuals to take on lease of expressway areas for installation of Intelligent Traffic Signs and billboards of different types, including retail areas around toll plazas, and other business activities, such as, the use of the expressway areas for serving mobile network services in Thailand.

(4) Property Used in Business Operations

4.1 Main Assets

As of December 31, 2021, the Company and its subsidiaries had main assets used in business operations, as follows:



The main assets of the Company and its subsidiaries as indicated above can be classified into class of assets and companies, as follows:

4.1.1 Building and Equipment

The book value of the building and equipment of the Company and its subsidiaries was as follows:



Company	Net Book Value (Million Baht)	Ownership	Encumbrance
BEM	360	Owner*	None
NECL	10	Owner*	None
BMN	14	Owner	None
Total	384		

Remarks: * The Company and the subsidiaries take on a lease of building spaces for use as their Head Offices. For the operation buildings, the Company and subsidiaries have been granted the right to use the operation buildings from the Concessionaire pursuant to the Agreement.

4.1.2 Rights to Operate Expressway Sectors

The rights to operate expressway sectors are considered the costs of construction of the Expressways and amortized according to the nature of utilization within the Concession period. The book value of the rights to operate expressway sectors of the Company and its subsidiaries are as follows:



Company	Net Book Value (Million Baht)
BEM	27,242
NECL	4,679
Total	31,921

On February 20, 2020, the Company/NECL and EXAT signed the Second Stage Expressway Agreement (Amendment) and signed the Bang Pa-in - Pak Kret Expressway Project Agreement (Amendment), for the respective specified concession periods of 15 years and 8 months from February 20, 2020, which are entitled to be extended under the remaining entitlement in the existing Agreements.

The essence of revenue sharing and renewal of the concession periods under the respective Agreements (Amendments) is as follows:

Expressway	Revenue Sharing The Company/ the Subsidiary : EXAT	Extended Period	Remaining Extension Entitlement *
Si Rat (Sectors AB, C and D)	First Stage and Second Stage Sector AB 40 : 60 Sector C 100 : 0	15 years and 8 months to October 2035	4 years and 4 months
	Sector D 100 : 0	8 years and 6 months to October 2035	11 years and 6 months
	100 : 0	9 years and 1 month to October 2035	10 years and 11 months
Udon Rattaya (Bang Pa-in- Pak Kret)			

Remark: * The remaining period under entitlement to full extension of the respective Agreements as specified in the existing Agreements.

Toll rates have been revised to increase at a fixed rate every 10 years from September 1, 2018 for the Second Stage Expressway Agreement and every 10 years from November 1, 2018 for the Bang Pa-in - Pak Kret Expressway Project Agreement at the rates specified therein.

4.1.3 Intangible Assets under the Concession Agreement for the MRT Blue Line Project

The intangible assets under the Concession Agreement for the MRT Blue Line Project are considered the costs of construction of the MRT Blue Line Project and the installation of the equipment for commercial developments and amortized according to the nature of utilization within the Concession period. The book value of the Intangible Assets under the Concession Agreement for the MRT Blue Line Project of the Company and its subsidiaries are as follows:



Company	Net Book Value (Million Baht)
BEM	45,096
BMN	273
Total	45,369

4.2 Investments in Subsidiaries

As of December 31, 2021, the book value of investments in subsidiaries as per the Company's separate financial statements in total of Baht 768 Million which invested in NECL Baht 154 Million and invested in BMN Baht 614 Million, the detail of the subsidiaries as per Attachment 4.

Policy on Investment

- To invest in businesses which are related, similar, or beneficial, and support the Company's business operations, in order to provide opportunities and long-term yields, and strengthen the Company's stability and operational results.
- To invest in projects or acquire ordinary shares in project operators, in a manner of long-term investments.
- To invest up to the minimum proportion to allow the Company to participate in setting out policies, monitoring and reviewing operations of such companies so invested;
- Not to invest in any project giving rise to environmental impact or contrary to the good moral of the society.



For more information, please see Attachment 4: Company's Operating Assets and details of the Asset appraisal

(5) Work Pending Delivery

- None -

1.3 SHAREHOLDING STRUCTURE OF COMPANY GROUP

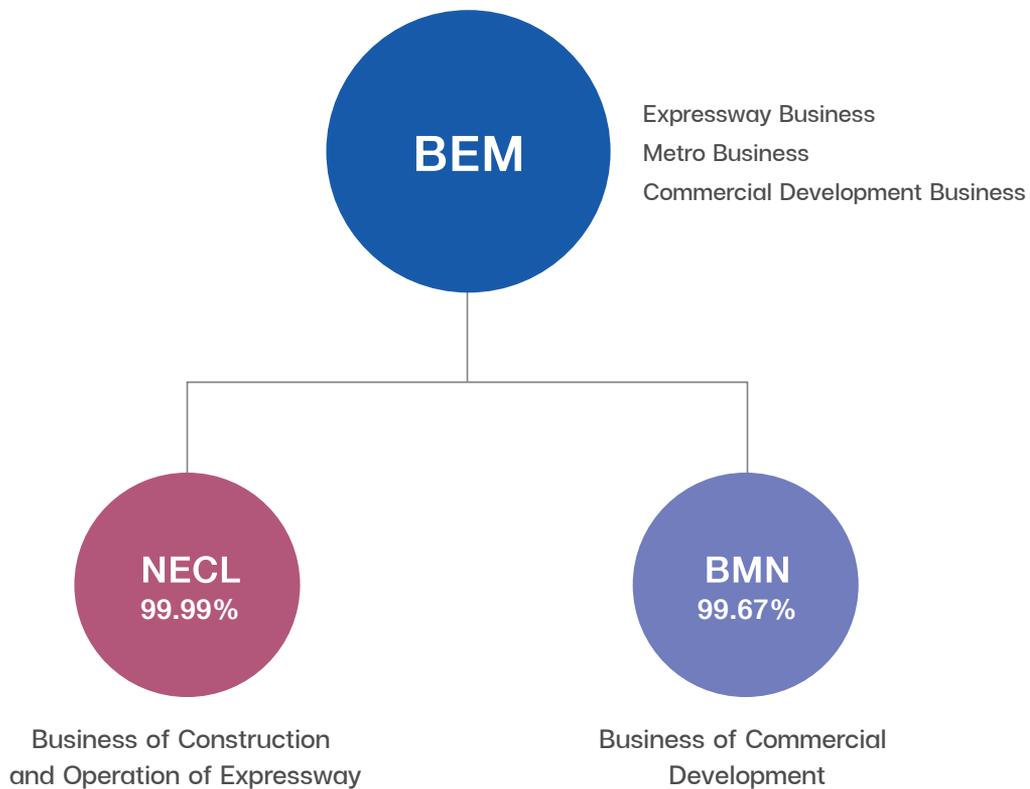
1.3.1 SHAREHOLDING STRUCTURE OF COMPANY GROUP

1. POLICY ON OPERATIONAL WITHIN THE GROUP

The Company invested in 2 subsidiaries, which are NECL and BMN. The nature of businesses of the subsidiaries are as follows;

1. NECL is a company founded for the construction and management of the Udon - Rathaya Expressway under the Bang Pa-in - Pak Kret Expressway Project Agreement; and
2. BMN is a company founded for operating of the commercial developments, mostly are commercial developments related to the Company’s Concession Agreements both in MRT Systems and Expressway Systems.

2. CHART OF SHAREHOLDING STRUCTURE AND THE COMPANY’S SHAREHOLDING PERCENTAGE AS OF MAY 10, 2021



3. HOLDING COMPANY

-N/A-

4. LEGAL ENTITIES IN WHICH THE COMPANY HOLDS 10 PERCENT OR MORE OF SHARES

Company	Northern Bangkok Expressway Company Limited (“NECL”)
Business Operation	Construction and management of the Udon Rattaya Expressway
Head Office	587 Sutthisarn Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400
Registered Capital	Baht 6,000 Million, Baht 5,250 Million of which is paid up.
Total of Shares	294 Million Ordinary Shares 306 Million Preferred Shares
The Company’s Shareholding Percentage	99.99 percent
Telephone	0 2641 4647
Fax	0 2641 4646

Company	Bangkok Metro Networks Company Limited (“BMN”)
Business Operation	Procurement and production of advertising media in various forms. Operate the commercial developments in MRT and Expressway systems.
Head Office	832 Sutthisarn Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400
Registered Capital	Baht 254 Million, which is fully paid up.
Total of Shares	25.4 Million Ordinary Shares
The Company’s Shareholding Percentage	99.67 percent
Telephone	0 2690 8200
Fax	0 2690 8212
Website	www.bmn-mrt.com

Company	TTW Public Company Limited (“TTW”)
Business Operation	Production and distribution of water supply to the Provincial Waterworks Authority and investment in companies operating the business of other public utilities
Head Office	30/130 Moo 12, Buddhamonthon 5 Road, Tambon Rai Khing, Amphoe Samphran, Nakhon Pathom Province 73210
Registered Capital	Baht 3,990 Million, which is fully paid up.
Total of Shares	3,990 Million Ordinary Shares
The Company’s Shareholding Percentage	18.47 percent
Telephone	0 2811 7526
Fax	0 2420 6064
Website	www.ttwplc.com

Company	CK Power Public Company Limited (“CKP”)
Business Operation	Investment by holding shares in other companies (Holding Company) operating the business of production and distribution of electricity from various types of energy
Head Office	587 Viriyathavorn Building, 19th Floor, Sutthisan Winitchai Road, Ratchadaphisek Subdistrict, Dindaeng District, Bangkok 10400
Registered Capital	Baht 9,240 Million, Baht 8,129 Million of which is paid up.
Total of Shares	9,420 Million Ordinary Shares
The Company's Shareholding Percentage	17.59 percent
Telephone	0 2691 9720
Fax	0 2691 9723
Website	www.ckpower.co.th

1.3.2 THE PERSON WHO MAY HAVE A CONFLICT OF INTEREST

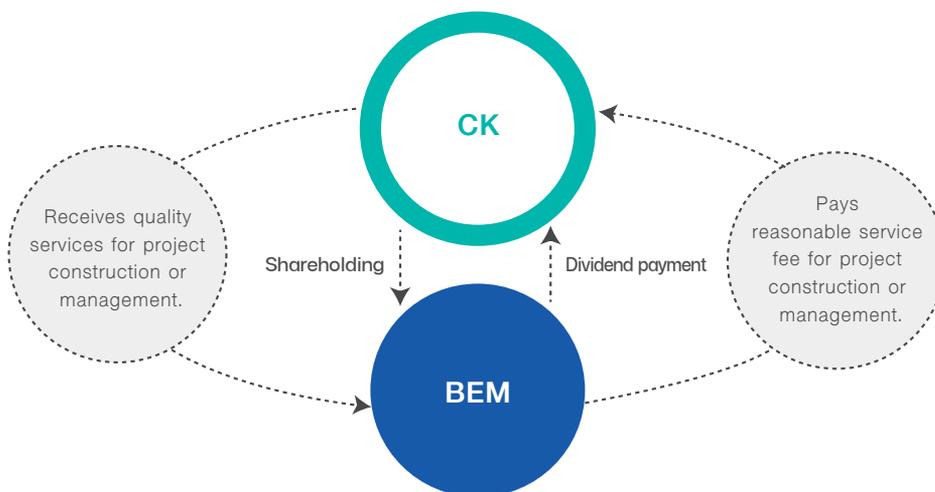
-None-

1.3.3 RELATIONSHIP WITH BUSINESS ALLIANCE OF MAJOR SHAREHOLDER

The Company's major shareholder was CH. Karnchang Public Company Limited (“CK”), as of December 31, 2021, whereby CK was holding 4,787,121,829 shares in the Company, representing 31.32 percent of the Company's paid-up capital. From the past until the present, the Company has engaged CK to conduct construction and operation of various projects, as CK is a large construction company in Thailand, which has potential, knowledge, and expertise, and has thoroughly experiences with the civil infrastructure of the expressway and metro projects, including M&E Equipment. In addition, CK is experienced in the contractual operations on a Lump Sum Turnkey basis, and can deliver quality works on schedules, and is also the Company's strategic investment partner. As a result, CK has taken on responsibility for and commitment to great success in the projects.

Therefore, in the future, it is possible that the Company will further engage CK to conduct project construction or management. However, in execution of transactions with CK, which is considered a person which may have a conflict of interest with the Company, the Company has strictly complied with its policy on execution of connected transactions.

Relationship with Business Alliance of Major Shareholder



1.3.4 SHAREHOLDERS

1. LIST OF MAJOR SHAREHOLDERS

As of May 10, 2021, which was the latest closing date of the share register book, the first 10 major shareholders were as follows:

No.	Shareholders	Number of Shares (shares)	Shareholding Percentage (percent)
1.	Group of CH. Karnchang Public Company Limited ⁽¹⁾	4,923,781,781	32.21
2.	Mass Rapid Transit Authority of Thailand	1,256,259,584	8.22
3.	Thai NVDR Company Limited	1,074,854,135	7.03
4.	Krung Thai Bank Public Company Limited	815,356,075	5.33
5.	Social Security Office	581,811,900	3.81
6.	Mr. Wichai Wachiraphong	349,802,957	2.29
7.	Bangkok Bank Public Company Limited	303,448,709	1.99
8.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	299,047,369	1.96
9.	STATE STREET EUROPE LIMITED	295,908,582	1.94
10.	Mr. Min Tieworn	188,000,000	1.23
	Total	10,088,271,092	66.01
	Others	5,196,728,908	33.99
	Grand Total	15,285,000,000	100.00

Remarks:

⁽¹⁾ CH. Karnchang Group's shareholding in the Company represented 32.21 percent of the Company's paid-up capital, with the details as follows:

CH. Karnchang Group	Number of Shares	Percentage of Paid-up Capital
1. CH. Karnchang Public Company Limited ⁽²⁾	4,787,121,829	31.32
2. CH. Karnchang-Tokyu Construction Company Limited ⁽³⁾	136,659,952	0.89
	<u>4,923,781,781</u>	<u>32.21</u>



- (2) CH. Karnchang Public Company Limited (“CK.”) operates the general construction business, with Trivisvavet Group holding shares representing 34.270 percent of the Company’s paid-up capital (information as of May 11, 2021), with the details as follows:

Trivisvavet Group	Number of Shares	% of Paid-up Capital
1. Mahasiri Siam Co., Ltd. ⁽⁴⁾	247,512,365	14.612
2. CH. Karnchang Holding Co., Ltd. ⁽⁵⁾	189,396,530	11.181
3. CK. Office Tower Co., Ltd. ⁽⁶⁾	86,048,212	5.080
4. Mrs. Sopida Trivisvavet	15,383,225	0.908
5. Mr. Plew Trivisvavet	14,231,497	0.840
6. Mrs. Pranee Tongkittikul	4,614,342	0.272
7. Mrs. Saikasem Trivisvavet	6,061,142	0.358
8. Miss Walainut Trivisvavet	3,177,484	0.187
9. Mr. Nattavut Trivisvavet	2,465,785	0.146
10. Miss Supamas Trivisvavet	1,700,000	0.100
11. Mr. Sombat Trivisvavet	1,650,000	0.097
12. Mr. Kritsada Trivisvavet	1,366,145	0.081
13. Mr. Kris Trivisvavet	1,363,070	0.080
14. Mr. Puwanet Trivisvavet	1,114,855	0.066
15. Miss Kanthanat Trivisvavet	1,067,600	0.063
16. Mrs. Korakot Trivisvavet	1,050,000	0.061
17. Miss Thanatchsorn Trivisvavet	780,040	0.046
18. Miss Sawanya Trivisvavet	700,025	0.041
19. Miss Phatsanan Trivisvavet	374,600	0.022
20. Mr. Prasert Trivisvavet	204,285	0.012
21. Mrs. Ornanong Trivisvavet	102,775	0.006
22. Mrs. Saranthorn Trivisvavet	100,000	0.005
23. Miss Suratha Trivisvavet	61,100	0.004
24. Mr. Sompol Trivisvavet	25,500	0.001
25. Mrs. Bangorn Trivisvavet	20,000	0.001
26. Mrs. Chayanich Trivisvavet	1,742	0.000
	<u>580,572,319</u>	<u>34.270</u>

Shareholders may view additional information of CK in the Annual Registration Statement (Form 56-1) on the website of the SEC Office (www.sec.or.th) or the website of the Stock Exchange of Thailand (www.set.or.th).

- (3) CH. Karnchang-Tokyu Construction Co., Ltd. operates the business of construction of all types, having a total of 1,000,000 shares, with its 549,999 shares representing 55 percent held by CH. Karnchang Plc.
- (4) Mahasiri Siam Co., Ltd. operates the investment business, having a total of 9,000,000 shares, with its 7,782,987 shares representing 86.48 percent held by Trivisvavet Group.
- (5) CH. Karnchang Holding Co., Ltd. operates the investment and consultation business, having a total of 8,400,000 shares, with its 2,100,000 shares representing 25 percent held by Mahasiri Siam Co., Ltd., and its 5,250,000 shares representing 62.50 percent held by Trivisvavet Group.
- (6) CK. Office Tower Co., Ltd. operates the business of investment and consultancy, having a total of 3,000,000 shares, with its 750,000 shares representing 25 percent held by Mahasiri Siam Co., Ltd., and its 1,875,000 shares representing 62.50 percent held by Trivisvavet Group.

2. SHAREHOLDERS’ AGREEMENT

There was no shareholders’ agreement between the Company and its major shareholders.

1.4 NUMBER OF REGISTERED CAPITAL AND PAID-UP CAPITAL

- 1.4.1 The Company has the registered capital of Baht 15,285 Million, of which has already been paid up, divided into 15,285 Million Ordinary Shares at the par value of Baht 1 per share.
- 1.4.2 As at December 30, 2021, the Company's 870,212,730 Ordinary Shares were used as underlying securities for the issuance of Non-Voting Depository Receipt or NVDR, representing 5.69 percent of all shares in the Company. Such shares entitle their holders to receive dividends from investment in NVDR in the same amount as such dividends received by Thai NVDR Company Limited from the Company, provided that NVDR holders shall not be entitled to vote at any shareholders' meeting of the Company. Investors may check the number of NVDR from the Stock Exchange of Thailand's website at www.set.or.th/nvdr.

1.5 ISSUANCE OF DEBENTURES

As of December 31, 2021, the Company has unsubordinated, unsecured debentures in the amount of Baht 40,085 Million which have not yet been due to redeem. In this regard, TRIS Rating Co., Ltd. assigned the "A-" rating to the Company's debentures with a "stable" outlook on April 1, 2021. The key details of the debentures summarized as follows:

Debenture	Issue Date	Due Date	Maturity	Amount (Million Baht)	Interest Rate	Conditions
BEM236A	24 Jun 16	24 Jun 23	7 years	2,000	3.00%	-
BEM266A	24 Jun 16	24 Jun 26	10 years	3,335	3.30%	-
BEM286A	24 Jun 16	24 Jun 28	12 years	2,750	3.61%	-
BEM286B	11 Aug 16	24 Jun 28	12 years	500	3.61%	-
BEM250A	21 Oct 16	21 Oct 25	9 years	2,500	3.78%	-
BEM270A	21 Oct 16	21 Oct 27	11 years	3,000	3.95%	-
BEM229A	7 Sep 17	7 Sep 22	5 years	2,000	2.65%	-
BEM249A	7 Sep 17	7 Sep 24	7 years	3,000	3.10%	-
BEM234A	5 Apr 18	5 Apr 23	5 years	3,500	2.46%	-
BEM254A	5 Apr 18	5 Apr 25	7 years	3,500	3.01%	-
BEM225A	9 May 19	9 May 22	3 years	1,000	2.65%	-
BEM245A	9 May 19	9 May 24	5 years	2,000	3.18%	-
BEM265A	9 May 19	9 May 26	7 years	1,000	3.59%	-
BEM295A	9 May 19	9 May 29	10 years	1,000	3.84%	-
BEM246A	10 Jun 20	10 Jun 24	4 years	1,000	2.88%	-
BEM306A	10 Jun 20	10 Jun 30	10 years	1,300	3.50%	-
BEM326A	10 Jun 20	10 Jun 32	12 years	700	3.78%	The debenture issuer has the early redemption right on the fifth anniversary from the issue date or on any date thereafter.
BEM244A	28 Apr 21	28 Apr 24	3 years	2,000	1.56%	-
BEM264A	28 Apr 21	28 Apr 26	5 years	2,000	2.24%	-
BEM284A	28 Apr 21	28 Apr 28	7 years	1,000	2.91%	-
BEM314A	28 Apr 21	28 Apr 31	10 years	1,000	3.33%	-
			Total	40,085		

1.6 POLICY ON DIVIDEND PAYMENT

1. THE COMPANY'S POLICY ON DIVIDEND PAYMENT

The Company has the policy to pay a dividend at not less than 40 percent of the net profit of each year, taking into account the operational results, financial structure and obligations, investment, as well as regular payment of dividends to shareholders. In this regard, the Board of Directors may pay an interim dividend to shareholders when it is of the view that the Company has sufficient profit and cash flow to pay a dividend. Once the dividend payment has been made, such dividend payment shall be reported to the following shareholders' meeting.

The Company's dividend payment in the previous years was as follows:

Dividend from Operations	Dividend Declared (Million Baht)	Dividend per share (Baht)	Net Profit (Million Baht)		Net Profit per Share (Baht)		Percentage of Dividend to Net Profit	
			Separate Financial Statements	Consolidated Financial Statements	Separate Financial Statements	Consolidated Financial Statements	Separate Financial Statements	Consolidated Financial Statements
2017								
- First half	917	0.06	1,442	1,425				
- Second half	1,070	0.07	1,533	1,698				
Total in 2017	1,987	0.13	2,975	3,123	0.20	0.20	67%	64%
2018								
- First half	917	0.06	1,695	1,714				
- Second half	1,376	0.09	1,412	3,603				
Total in 2018	2,293	0.15	3,107	5,317	0.20	0.35	74%	43%
2019								
- First half	917	0.06	1,626	3,977				
- Second half	1,376	0.09	1,298	1,458				
Total in 2019	2,293	0.15	2,924	5,435	0.19	0.36	79%	42%
In 2020	1,529	0.10	1,698	2,051	0.11	0.13	90%	75%
In 2021 ⁽¹⁾	1,223	0.08	772	1,010	0.05	0.07	158%	121%

Remark: ⁽¹⁾ An agenda to be proposed to shareholders for consideration in the 2022 Annual Ordinary General Meeting of Shareholders.

2. POLICY ON DIVIDEND PAYMENT OF THE SUBSIDIARIES

NECL and BMN has the policy on dividend payment at the rate of approximately 40 percent of net profit after deducting statutory reserves, by taking into consideration the operational results in the fiscal year of the separate financial statements as at the end of the fiscal year and under the conditions of the credit facility agreement, subject to the investment plan, necessity and appropriateness in other aspects as the board of directors of the subsidiaries deems appropriately.

2 RISK MANAGEMENT

2.1 RISK MANAGEMENT POLICY AND PLAN

The Company realizes the significance of the management of risks from business operations under the changes of internal and external factors affecting its operational results. Risk management is considered a key instrument for business administration to ensure efficient and effective achievements and promote its competitiveness, as well as a key factor of the Good Corporate Governance. The Company thus arranges for the systematic risk management, monitoring, and measures to minimize risks continuously. The Board of Directors has appointed the Corporate Governance and Risk Management Committee for policy-level consideration on the adequacy and appropriateness, with the Management to supervise the overall risk management process of the organization and perform daily routine work on behalf of the Corporate Governance and Risk Management Committee to monitor, evaluate and prepare a report on risk management to the Board of Directors for information.

The Company has prepared an annual risk management plan, a risk management handbook as guidelines in the operations, and regularly monitors, evaluates, reviews to be in line with the ever-changing internal and external circumstances, including a backup plan in case of emergency, in order to ensure prompt action in solving problems and coordination with relevant units at all times. The risk management policy of the Company via website www.bemplc.co.th is as follows:

2.2 BUSINESS RISK FACTORS

Risk factors that may have a significant impact on the achievement of the Company's business goals are as follows:

2.2.1 RISKS TO BUSINESS OPERATIONS OF THE COMPANY

Current Risks Factors

- **Risk from Government Policy**

The Company has operated its businesses under the relevant Concession Agreements which are supervised by EXAT and MRTA; however, due to government policy, the Company may not be able to comply with the terms and conditions of the Concession

Agreements, and as a result, the Company may have to change its operations or incur additional costs, which could impact the Company's performance.

The uncertainty of political stability and changes in government administration by political parties in charge of supervision has resulted in changes in related policies, laws, regulations. This may have an impact on the specified contractual terms that EXAT or MRTA may be unable to meet or has other intentions for the Company to take actions other than those stipulated in the contracts or agreements.



In this regard, the Company has created a joint operating system with the government agencies, both at the administrative and operating levels, by sharing sufficient information with each other to ensure good understanding towards each other, as well as regularly and closely monitoring the political situations and policy changes, and reasonably reviewing the strategic and operational plans to suit the situations and ensure the mutual interest in the long run.

- **Risk Relating to Interest Rate Fluctuations**

The Company remains obliged, which have a large interest from the Concession Agreement. As a result, the Company's interest expenses are considered its significant expenditures. If the interest rate on loan is significantly changed, it may affect the Company's financial costs and business operations. The Company has managed such risk by arranging for the loan structure at floating interest rates and loans at fixed interest rates as appropriate. Making the contract to prevent such risks from floating interest rates and fixed interest rates. In addition, The Company also follow up the tendency circumstance of interest rate change for improving floating interest rates as appropriate.

- **Risk Relating to Fluctuation of Cost of Rail Business**

The cost of farebox is deemed the main expenditure in the Company's mass transit system project management business operation, consisting of repair and maintenance costs for the metro system and civil infrastructure, public utility cost, personnel cost, and payment of remuneration from fare revenue.

As for the maintenance costs under the M&E contract, the Company's contract is in foreign and Baht currencies, subject to adjustment based on the Consumer Price Index as specified in the contract. Given the long-term contract, the Company will be then exposed to risk due to changes in such indices.

The public utility cost mainly comprises the cost of electricity used at the metro stations and for train operations. The cost of electricity may be adjusted according to the electricity rates of the Metropolitan Electricity Authority, which may result in the Company's increased cost.

In the Concession Agreement for the MRT Blue Line Project, the service fees for the O&M Services payable by MRTA to the Company are calculated and based on the projections of operating expenses estimated by the Company, whereby such service fees may be adjusted only based on the actual inflation rate and electricity charge rate under the method specified in the Concession Agreement. Therefore, profits from the Operation Service will vary according to the Company's ability to manage the actual costs and expenses to mirror the specified projections. Should the actual costs and expenses be different from the projections, the Company's operational results may be affected since the Company is not able to request compensation or increase the service fees from MRTA.

However, with the expertise and experience in the management of the MRT Blue Line Project, the Company is confident in its ability to efficiently manage costs and expenses for operations to be close to the projections.

- **Risk from Engagement of Outsourced Experts as Main Contractors for Supply and Maintenance of the M&E Equipment**

The Company has entered into the agreement for the procurement of the M&E Equipment and an agreement for maintenance of the M&E Equipment with outsourced contractors, namely, Siemens Limited, Thailand, and Japan Transportation Technology (Thailand). Thus, if such outsourced contractors are unable to provide services to the Company under their respective agreements or if there is any change in the maintenance agreement, the Company's business operation may be affected and if the trains cannot be opened for service, the Company's image may be tarnished.

In this regard, the Company has managed the risk by studying information from the members of the international federations of public transport operators, such as UITP, APTA, NOVA Group of Metros, including the advice from Lloyd's Register Rail, the highly experienced consultant. The Company can then select and procure other manufacturers' M&E Equipment which is compatible with its existing system. To that end, the Company has also adopted a personnel development policy to ensure that its staff have the sufficient capabilities in collaborating with both local and overseas equipment manufacturers and contractors in the maintenance and repair of the M&E Equipment and the rail system in order to achieve efficiency without reliance on the sole existing manufacturer.

- **Risk Relating to Revenues less than Projections**

The Company provides both expressway and metro services, therefore, the Company's core revenues are tolls and fares, which may be subject to a variety of external factors beyond the Company's control, such as, the expansions of electric train networks, the availability of a good constant transport system, the alternative fare rates of other transit systems which passengers can choose from, road traffic congestion, oil prices, expansion of real estate, condominiums and businesses surrounding the metro routes which enable people to reach their travel goals, or serious epidemics, etc., all of which affect the volume of the Company's service users. Moreover, the Company generates commercial development revenue, which may vary depending on the local and overseas economic conditions, competition in advertising media and retail space lease business, as well as the progress in opening of retail shops in the stations, several factors of which are beyond the Company's control. Therefore, should the Company's revenues differ from study results or projections, it may affect the liquidity and serviceability management with respect to the existing obligations owed to the lending financial institutions or creditors according to the mutually agreed schedule.

To minimize such risk, the Company has established a unit to closely monitor any impact which may affect various factors and formulated appropriate strategies. In addition, the Company can limit potential impacts from risk factors, such as oil prices, road traffic congestions, and alternative fare rates of other transit systems available for passengers, due to the Company's full services of expressways and metro, both of which are considered substitute products. With respect to the commercial development, the Company has developed new advertisement media to increase its commercial development revenue.

The situation of the outbreak of Coronavirus Disease 2019 (COVID-19) has been detrimental to the Company. To contain the spread of the disease, the government has adopted high-level control measures and promulgated the Emergency Decree on Public Administration in Emergency Situation, which has

encouraged people to refrain from traveling. In 2021, travel volume had been declining steadily since April 2021 in both the expressway business and the metro business, thereby causing a decrease in the Company's revenue from the previous year, which was lower than the expected estimates. Despite the fact that the Company's revenue would be considerably affected by the COVID-19 outbreak situation, the Company has conducted stringent cost management while receiving dividends from investments in other companies. As a result, the Company has enough revenue to operate the businesses.

- **Risk from Serious Accidents, Public Unrest, or Natural Perils**

The Company's businesses of both construction and management of the expressways and metro are exposed to an event or external factor which results in an emergency, for example, perils, serious accident, earthquake and such events which may be caused by terrorism, sabotage as bombing, riot, including gathering of insurgent groups, which may force the Company to suspend its services, thereby giving rise to loss of revenue, damaging assets, tarnishing image and destroying reliability of the Company. For this reason, the Company has set forth emergency plans in response to any such events which may suddenly occur, including preparation to ensure that the staff in charge can take prompt actions to resolve any emergency which arises, by practicing emergency drills on how to deal with emergency situations by way of simulation of such various situations as emergency inside a metro station from a bomb threat and an explosion inside a metro station or rolling stock, fire inside a rolling stock, flooding in a tunnel, etc., along with installation of metal detectors, CCTV cameras, with security guards in charge covering all areas, as well as establishing an alarm monitoring agency and coordinating with relevant agencies to prevent any serious accidents and to be ready for rescue operations.

The Company has taken out insurance against property all risks, business interruption, public liability, and terrorism in respect to the expressway and metro businesses.

- **Risk in respect of Personnel**

As the government realizes the significance for solving problems on traveling and traffic in Bangkok by using the mass rapid transit system, it thus expedited the expansion of the metro network and the connecting system to other transportation systems. Therefore, it would be highly possible that there would be governmental organizations or private agencies operating the mass rapid transit system business which require additional personnel with knowledge, expertise, and skills in the technical field in the rail business. As a result, it would be likely that the Company's main personnel would be enticed away from the Company.

The risk from a shortage of competent personnel is considered as one of the Company's risks, as they are a key factor to drive our organization to success. The Company gives priority to the personnel risk management, starting from the nomination and selection of good and qualified personnel suitable for the Company; continuous staff training courses to improve knowledge, skills, and abilities in various fields necessary for the performance of work based on each staff's position and designated duties; encouragement of the staff morale; consideration of appropriate and fair remuneration and welfare; organizing outing activities to encourage staff to love, unite, feel connected with the organization; review and revisions of the operation process and work system to ensure readiness at all times, as well as preparation of the succession plan, whereby the Company has prepared the succession plan and appointment of a working group comprising high-level executives to set up guidelines in the selection of staff to ensure the availability of personnel, both in the executive and supervisor levels, in order to prevent the risk from a shortage of personnel having knowledge, expertise and technical skills for specific work. The Company has arranged for collection of the body of knowledge for specific work and extended the results to the knowledge management program, in order to continuously improve the work process.

- **Operational Risk**

The Company takes into account the operational risks in the expressway and metro businesses which may arise from both internal factors and external factors, including the work process, staff, work system or information technology system, and external events or factors which may give rise to monetary and non-monetary damage, having an impact on the services, and as a result, the Company loses revenue; its image and reputation are harmed; the service users lose their trust in the Company. Therefore, it is imperative to have a careful and thorough supervision system in place to deal with potential incidents, for example, when the collection system may be disrupted, there is a problem with traffic congestion on the expressway, service users who are not ready to drive vehicles endanger safety of the staff operating on the expressways, station structures, tunnels, weirs and piers are destroyed due to weathering, a metro collision occurs due to faulty or non-functional braking systems, a metro is derailed, thereby resulting in reduced or interrupted performance, injured staff, injured or killed passengers. As such, the incident scene must be closed for an extended period of time.

In this regard, the Company has studied risk factors and analyzed the cause of potential problems in a manner of Preventive Maintenance in all cases which may result in the prolonged system failure or disruption in order to prepare preventive plans and remedial measures in advance, identify Knowledge Management (KM) solutions to cover all risk issues, that is, improving the efficiency of the toll booths, developing a program to help inspect the efficiency of the transmission system to make it rapidly operational without cumulative traffic, increasing the size of the protection vehicle to better protect the staff working on the expressways while ensuring the safety for motorists, improving the protection work instructions by providing front-back blocking cars, providing safety equipment for staff, such as safety helmets, reflective vests, scheduling a regular visual inspection of the tunnels, checking for breaks and cracks in concrete, with the metro and propulsion systems being designed to have an ATP system, setting a preventive maintenance plan for the propulsion system, requiring the train controllers and officers to undergo training/refreshers programs by controlling the Qualified Person according to the relevant license, establishing emergency handling procedures,

monitoring and measuring the Stray Current at specified intervals, visually checking the condition of the tracks as scheduled and the measuring tools, inspecting damaged structures of the tunnels, column structures and track structures.

- **Risk from Return on Investments in Companies less than Projections**

The Company may be exposed to a risk from return on investments in various companies less than projections in the event that the operational results of such companies whose shares are held by the Company do not meet the expectations, thereby affecting the investment plan and the implementation of the strategic plans of the Company. To minimize such impact, the Company will take into account the proportion of its investments in such companies in line with the Company's investment policy that allows the Company to receive a long-term return on investment by participating in policy making and monitoring, inspecting the operations of the companies invested in by the Company or considering changing the investment type from investments in associates to investments in available-for-sale securities in order to reduce the risk from interest recognition from the operational results which may show a loss to revenue recognition from dividends.

In this regard, the decrease in the shareholding percentage to be the investment in the available-for-sale securities is deemed to minimize the risk from return on investments in companies less than projections in the event that such company's operational results fail to meet the projections. However, the Company sent its representatives to be members of the board of directors of the companies invested in by the Company to ensure the Company's participation in their management and acknowledgement of the operational results of the companies invested in by the Company on a regular basis.

Emerging Risks Factors

- **Risk from Serious Epidemics**

The emergence of a serious epidemic is unpredictable. When it strikes, it will have spread over a large area, thereby harming business operations and people's well-being, and it will take a long time to address, which requires cooperation from all parties involved, including the public, private, and people sectors.

The Company has established procedures for monitoring the serious epidemic situation, epidemic prevention measures, remedial measures, and communication measures accessible to those involved, including specifying details of epidemic prevention, epidemic control and post-treatment monitoring of staff to confirm that they are sterilized and the results are then specified in the work rules and regulations regarding prevention and containment of dangerous communicable diseases, as well as preparing a business continuity management plan, and the Company can serve the customer, take care staff including related person in the situation of the outbreak of COVID-19.

- **Risk in respect of Information Security**

The working style has changed and depended on technology to support its operations for providing such service with the highest efficiency in a constant manner, which there may be a risk from disruption of main work systems, such as equipment of the toll collection control system, traffic control system, electricity system, and equipment (electrical power system, signaling system, communications system, SCADA system, platform screen door system, automatic fare collection system, signage system) the Company's internal computer system may have risks in respect of cyber security, including the system is attacked by a computer virus, equipment of the toll collection system may become inoperable, the metro system may be disrupted, and as a result, the services may be unavailable or delayed due to the long time it takes to resolve such problem, thereby harming the Company's image and reliability.

The Company has established the usage of information system policy and made a manual specifying procedures and methods for the information system security in conformity with the Computer Act with certified according to the ISO/IEC 27001 : 2013 Information Security Management System Standard, by providing the access prevention/control system which protects information from intrusion or attacks on the server from both inside and outside (Firewall), as well as preparing an emergency plan while also practicing on data recovery in order to accommodate possible incidents which may have an impact on system equipment to ensure that the staff in charge are well prepared to be able to have an access to immediately tackling the arising problems.

and its personnel have been developed in the field of information security management to enable them to perform their duties under the work process / system so developed, which includes following up news on cyber threats in order to take precautions and make preparedness to handle them at all times.

Nevertheless, the Company is in the process of monitoring environmental and social risks, covering respect for human rights, good corporate governance, and corruption, which may have an impact on the business operations or on the corporate strategies or goals of the Company, in order to be prepared to prevent and adapt to various risks as well as to seek business opportunities from those risks on an efficient basis, and to review the Company's risk management plan to ensure that the Company's risk management covers a wide range of issues completely and effectively to reflect business changes.

2.2.2 RISKS TO INVESTMENT OF SECURITIES HOLDERS

Given that the Company issues financial instruments such as debentures, the securities holders may be exposed to the following risks:

- **Credit risk**

It is a risk that the financial instrument issuer may be unable to pay interest or be unable to repay the principal if the financial instrument issuer declares bankruptcy or defaults on payment, and the financial instrument offered for sale is not covered by the

Deposit Protection Agency, granting the financial instrument holder the right to claim debt repayment equal to that of other unsubordinated and unsecured creditors. On the other hand, securities holders can view credit ratings provided by risk rating agencies to help their investment decisions in assessing the credit risk of the debt instrument issuer. Furthermore, before investing, securities holders should research information, namely, the debt instrument issuer's operational results and financial status and also should follow up on news, including changes in credit ratings which are available on the websites of the SEC Office or credit rating agencies. In 2021, TRIS Rating Co., Ltd. affirmed the Company's credit rating at "A-", with a "Stable" outlook on April 1, 2021.

- **Price risk**

It is a potential risk when securities holders wish to redeem their securities before the redemption maturity date, where the securities may be sold for more than their par value or purchase price. As a result, securities holders do not receive interest and returns or receives interest and returns at a lower rate.

- **Liquidity risk**

It is a potential risk when securities holders wish to redeem their securities before the redemption maturity date, where the securities can be resold to other interested parties in the secondary market, which poses a risk that securities holders may not be able to sell their securities immediately at the desired price.

2.2.3 RISK TO INVESTMENT IN FOREIGN SECURITIES

- None -

3 DRIVING BUSINESS FOR SUSTAINABILITY

The Company, as an expressway and metro service provider, is committed to developing the transportation network for convenient journeys and alleviating traffic problems in Bangkok and its vicinity as a means to improve the quality of life of the service users. The Company has continuously improved and developed the efficiency of its services to ensure safe, convenient, and rapid journeys, in order to deliver the services through the state-of-the-art mass transit system network and create the good quality of life to people as the **“Route of Happiness for Better Travelling Mode,”** always subject to its business operations with social and environmental responsibility, as the best practices adhered to by the Company for sustainable business operations.

3.1 POLICIES AND GOALS OF SUSTAINABILITY MANAGEMENT

The Company is committed to operating business to fulfill its intention by primarily taking into account corporate governance, social and environmental responsibility for business growth and sustainable development, as well as mainly focusing on coordination for mutual benefits and growth of all groups of stakeholders as appropriate, in parallel with its good economic performance. The Company also plans for innovation development with the aim of minimizing impact

on climate change and in response to the Sustainable Development Goals (SDGs) in collaboration with its partners in the organization’s supply chain, and as such, adopts and communicates its operating policy for sustainable development to all staff, as the heart of driving business and concurrently the source of happiness, for strict compliance as part of every work process, delivery of quality services truly focused on stakeholders’ safety, as follows:

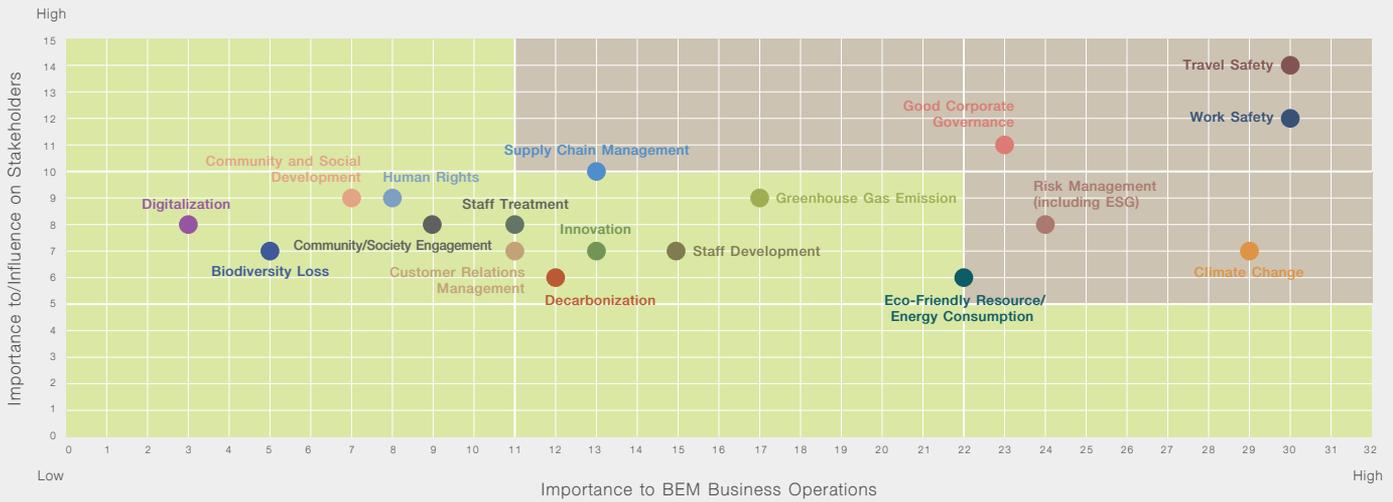
 <p>To lead the organization with the concept of sustainable development</p> <p>through communication and exchange of best practices with all of the Company’s stakeholders.</p>	 <p>To incorporate the sustainable development concept</p> <p>into every aspect of the work and decision processes of the Company.</p>
 <p>To promote personnel development by way of training</p> <p>and counseling, focusing on practices according to the sustainable development guidelines.</p>	 <p>To support and publicize regional operation</p> <p>practices and cooperation, including transfer of know-how, to achieve the ongoing sustainable development.</p>

MATERIAL ISSUES TO SUSTAINABLE DEVELOPMENT

The Company’s material issues to sustainable development comprise 5 key issues, namely



The issues regarding customer relations management and community or stakeholder engagement have been rated at moderate level since the COVID-19 situations last year have caused the Company to focus on safety and measures to prevent the spread of COVID-19.



3.2 MANAGEMENT OF IMPACT ON STAKEHOLDERS IN THE BUSINESS VALUE CHAIN

3.2.1 BUSINESS VALUE CHAIN

The Company has given importance to each and every step of acquiring products and services in its business value chain, based on the belief that management of the business value chain serves as a key strategy to increase value in terms of safety, including convenient and rapid transportation services.

The Company operates its business with the value chain from upstream, namely selection of traders in strict compliance with the international standards of the ISO 9001 Quality Management System and the ISO 14001 Environmental Management System through provision of knowledge, understanding and close monitoring and audits to ensure that the supply chain of traders has carried out their operations with environmental care to ensure sustainability in mutual business operations. Meanwhile, the Board of Directors has approved the principles as the guidelines for the Company's participation in fair commercial transactions in terms of engagement, transactions between the Company and its subsidiaries, including other related transactions.

Moreover, the Company has a policy to fairly treat its business partners and promotes the knowledge, understanding, practice, development in accordance with the framework for sustainable development in the Company's business sector, building reliability through the fair business operations with its traders and financial supporters, regarded as key success factor which enables the Company to deliver the quality services to the expressway and MRT service users even during a crisis. The Company then set out the practices towards traders in a way of the business operations with fairness to ensure that acquisition of goods and services meet standards, together with the commitment to developing and maintaining sustainable relationships with traders, and having the clear objectives regarding quality of goods and services as suitable for monetary value, technical quality and trust in each other.

The Company has arranged for the procurement policy, which serves as an upstream factor of the provision of services, with the details as follows:

- PROCUREMENT POLICY**

1. The procurement process must proceed with integrity, ethics, reliability, in good faith, transparency and auditability.
2. The procurement process shall have the clear criteria and procedures and give rise to the best interests of the Company with quality, punctuality and fairness towards related stakeholders.
3. The procurement of such goods and services which are legal and produced locally shall be the Company's first priority, taking into account the occupational health, safety and environment.
4. The green procurement shall be supported and promoted.
5. The relationships with traders and stakeholders shall be promoted and maintained for the Company's sustainable business development.

• SELECTION OF TRADERS AND FORMULATION OF POLICY ON GOODS AND SERVICES

The Company provides fair and equal procurement procedures for all traders and follows the procedures in a systematic way in compliance with the work procedures regarding procurement and conditions of contracts or agreements with fairness in accordance with the requirements of ISO 9001 Quality Management System, based on the practices as follows:

1. Determining the criteria for selection of traders through a strict screening process to ensure fair business operations without violation of human rights.
2. Ensuring equal and fair competition on available database, without discrimination or preventing any trader from participating in business competition.
3. Preparing contracts or agreements in appropriate, fair and standard forms.
4. Arranging for management, monitoring, surveillance, including rechecking systems, to ensure the full compliance with contracts or agreements, and internal control system to prevent fraud and misconduct in all steps of the procurement procedures.
5. Paying consideration to traders on time in accordance with terms of payment as mutually agreed.
6. Not allowing directors and/or staff to accept any benefit from traders privately or by reason of personal relationship.
7. Evaluating traders on a yearly basis and informing them of the results of the evaluation with suggestions for traders to continuously improve the quality of goods and services, and also allowing traders to contact the management to make any complaints if they are unfairly treated.
8. Refraining from seeking any trader's confidential information dishonestly or improperly, such as bribing directors and staff of its competitors.
9. Refraining from making a serious accusation against traders without reasonable grounds.

This includes the strict compliance with the requirements of ISO 14001 Environmental Management System through provision of knowledge, understanding and close monitoring audit, to rest assured that the Company's supply chain transacting a business with the Company has carried out its operations with environmental care to ensure sustainability in mutual business operations.

• PRIORITIZATION OF SUPPLIERS DIVIDED INTO 4 GROUPS, AS FOLLOWS:

1. Q-AVL : Quality Approved Vendor List = a group of suppliers who are traders/service providers with the Company, have been registered in the SAP system, and passed special consideration criteria as prescribed in the operating regulations for purchase orders/engagement without comparison with other suppliers;
2. AVL : Approved Vendor List = a group of suppliers who are traders/service providers with the Company and have been registered in the SAP system;
3. PVL : Potential Vendor List = a group of potential suppliers to provide services to the Company;
4. BVL : Blacklist Vendor List = a group of suppliers who are traders/service providers with the Company, have been registered in the SAP system, but whose services/work products do not pass the criteria, resulting in suspension of procurement/engagement until proven that they have developed/improved their services/work products and been approved to be removed from this list.

• TRADERS' PERFORMANCE REVIEW

The Company has arranged for management, monitoring, surveillance, including rechecking systems, to ensure the full compliance with contracts or agreements, and internal control system to prevent fraud and misconduct in all steps of the procurement procedures by evaluating traders on a yearly basis and informing them of the results of the evaluation with suggestions for traders to continuously improve the quality of goods and services.

In addition, the Company has allowed traders to contact the management to make any complaints if they are unfairly treated.

The Company provides the expressway and metro services, including commercial development, subject to the occupational health and safety, so as to deliver the efficient services and take into account its social and environmental responsibility.

• SAFETY FOR STAFF AND CONTRACTORS

The Company has conducted its work safety in accordance with Thai laws and local and international safety standards, namely:

- Quality Management System, Occupational Health and Safety, and Environmental Management System with the international standards of ISO 9001:2015, ISO 45001:2018, ISO/IEC 27001:2013 and ISO14001:2015 as applied and certified by external certification agency, i.e., TUV NORD (Thailand) Limited, SGS (Thailand) Limited, and in the past, the Company has focused on the design of the operation control procedures, process development, preventive and corrective measures to control risks from harms or accidents which may arise in the operations and provision of services, including the metro passengers, expressway users, commercial development customers, staff, contractors, suppliers and third parties entering the Company's vicinity, as well as optimal utilization of resources with the least possible impact on the environment and communities.

• USE OF ECO-FRIENDLY PRODUCTS CAMPAIGN

The Company has a policy to procure eco-friendly goods and services as clearly announced through www.bemplc.co.th, and also sets out the criteria for selection of eco-friendly products in its procurement procedures, with the preliminary criteria for procurement as follows:

1. Using materials with the least possible environmental impact, e.g., non-toxic, reusable, recycled and low-energy materials, etc.;
2. Using minimum materials, e.g., light-weight, small in size and the least possible kinds of materials, etc.;
3. Using the production technology with maximum efficiency, e.g., clean energy, minimum wastes from production process, and fewer steps of production process, etc.;
4. Using the transportation and distribution systems with maximum efficiency, e.g., reduction of unnecessary packages, use of packages made of recycled or reusable materials, and selection of transportation routes with optimum energy-saving, etc.;
5. Mitigating the environmental impact while in use, e.g., use of low-energy, low emission while in use, reduction of consumable materials and unnecessary parts;
6. Being cost-efficient throughout the useful life in terms of, among others, durability, simple repair and maintenance, extended use, and infrequent replacement, etc.;

7. Allowing for highly efficient handling after expiration of the useful life, e.g., collection with the least possible environmental impact, design of goods or parts for easy reuse or recycling, or energy return if disposed and landfill safety, etc.;
8. Being such goods or services with eco-friendly or green labels;
9. Being such goods or services from entities with the environmental quality certifications by institutes or government agencies in Thailand or abroad;
10. Being such goods or services registered as green products of Thailand Environment Institute, Thai Industrial Standards Institute, Ministry of Industry, or Department of Pollution Control, Ministry of Natural Resources and Environment, or any similar authority abroad;
11. Procuring goods or services from suppliers/service providers with the environmental management standard certifications, e.g., ISO 14001 or other environmental standards with available evidence, etc., or environmental conservation sponsors in Thailand with available evidence, e.g., revenue donations to the charities for environmental conservation, reforestation, Reuse-Refill-Recycle support with available evidence, etc.

• STRATEGIES ON CUSTOMER RELATIONS MANAGEMENT

The Company regularly publicizes such information on provision of the expressway and metro services as service fee rates, route suggestions, facilities via the website www.bemplc.co.th.

To create and manage customer relationships (Customer Relations Management - CRM) by managing the customer database and build a network in line with the CRM process, as the heart of the loyalty marketing and maintenance of the customer base, focused on efficient and effective response to customers' satisfaction through such strategies on organizing activities and dividing target customers into groups which would allow for efficient sales promotion strategies for the respective groups as a whole, and planning for sales promotion and marketing plans based on each group's target customers' lifestyle and settings.

The Company implements the marketing and sales promotion strategies in the expressway and metro businesses, with the details as follows:

• **MARKETING PROMOTION STRATEGIES OF EXPRESSWAY BUSINESS**

The Company has offered toll discounts in certain routes to attract target customers to regularly use the expressway services as their routine and eventually become regular customers. In 2021, NECL continued to provide toll discounts in the Udon Rattaya Expressway to expressway users at Muang Thong Thani Toll Plaza until December 31, 2021, and launched a new promotion in the form of special price coupons with a Baht 10 discount for 1 year from January 1 to December 31, 2022 for all types of vehicles. Moreover, the toll rates on the Si Rat – Outer Ring Road Expressway were revised since December 15, 2021 under the Concession Agreement for Investment, Design, Construction, Operation, Service and Maintenance of the Si Rat – Outer Ring Road Expressway Project with EXAT, namely from Baht 50/80/115 to Baht 65/105/150 for four-wheeled vehicles, six-wheeled to ten-wheeled vehicles and more than ten-wheeled vehicles, respectively. In this regard, the Company supported the government policy to lessen people’s cost of living by maintaining the existing toll rates in the form of coupons for 1 year from December 15, 2021 to December 15, 2022. Coupon books containing 20 coupons each are available for sale from December 1, 2021 to November 30, 2022 at all 9 Toll Plaza buildings on the Si Rat – Outer Ring Road Expressway. The Company has publicized the promotions and various privileges via offline media, such as,

newspaper, radio, leaflets, public relations signboard, and online channels, to ensure that customers are fully and widely informed of news and updates.

- o The Company, in association with EXAT, conducted a campaign for safe journeys during festive seasons in support of the government policy, and jointly promoted safe driving during the Songkran festival in 2021 under the campaign **“Triple Safe Journeys for Drivers, Companions and People”** and the New Year 2022 festival under the campaign **“Forward Planning for Convenient and Safe Journeys.”** Moreover, the Company and EXAT also jointly distributed souvenirs to expressway users during the New Year festival on a yearly basis.
- o The Company, in association with EXAT, improved the Electronic Toll Collection (ETC) service by providing additional one more lane at the second lane at Rama 9-1 Toll Plazas on the Si Rat Expressway to help alleviate traffic congestion in front of the toll plaza, facilitate expressway users, and minimize physical contact and the spread of COVID-19. Furthermore, the Company introduced the Easy Pass top-up service via credit cards and QR Code payments at the toll plazas on the Si Rat – Outer Ring Road Expressway.



• MARKETING AND COMPETITION OF RAIL BUSINESS

Customer Characteristics and Target Customers Target customers of the metro service are those who reside nearby the metro routes and those who do not reside around the routes but whose destinations are on the routes. The volume of the metro passengers from January 1, 2021 to December 31, 2021 may be categorized as follows:

- o The Company gives top priority to the quality of services by ensuring the safe, convenient, rapid, reliable and punctual services as the best journey alternative in response to the passengers' needs.
- o Due to the ongoing COVID-19 situation, the Company thus focused on building confidence among passengers in the use of the metro services under such safety measures as full vaccination of 100% of its staff, improved sanitation measures, spraying of disinfectants, including campaign for passengers to wear face masks at all times while in the stations, refrain from talking and always keep social distancing while using the services.
- o The metro service routes have integrated two types of public transportation systems to boost travel convenience, by covering both central business districts and residential areas, as follows: 1. Skywalks connected to buildings, shopping centers, retail shops, or landmarks (i.e., counting only the stations where skywalks connecting to each other on the ground level or underground are built); and 2. Connecting points with various types of transportation systems:

Skywalks in service connected to landmarks or buildings, shopping centers, retail shops:

- Sam Yan Station connected to Chamchuri Square and Samyan Mitrtown;
- Phra Ram 9 Station connected to CentralPlaza Grand Rama 9 and G Tower;
- Phetchaburi Station connected to Singha Complex;
- Sukhumvit Station connected to Interchange Tower;
- Phasi Charoen Station connected to Seacon Bangkhae Department Store;
- Lak Song Station connected to The Mall Bangkhae Shopping Center;
- Bang Yai Market Station connected to Central Plaza Westgate and Big C Extra Bangyai;
- Bang Krasor Station connected to Big C Rattanathibet.

Skywalks under construction connected to landmarks or buildings, shopping centers, retail shops:

- Bang Pho Station with elevated skywalk connected to Gateway Bang Sue (expected to open in 2022);
- Queen Sirikit National Convention Centre Station with underground passageway connected to the Queen Sirikit National Convention Centre (open for service in 2022);
- Lumpini Station with underground passageway connected to the One Bangkok project (expected to open in 2022);
- Si lom Station with underground passageway connected to the Dusit Central Park project (not yet scheduled to open for service).

Connecting Points with Various Types of Transportation Systems:

- Bang Khun Non Station connected to Charan Sanit Wong Railway Halt (SRT);
- Bang Pho Station connected to Bang Pho Pier;
- Bang Sue Station connected to the S.R.T. Red Line Mass Transit System at Bang Sue Grand Station Project (Red Line) and the long-distance Bang Sue Junction Railway Station (SRT);
- Chatuchak Park Station connected to BTS Mo Chit Station;
- Phahon Yothin Station connected to BTS Ha Yaek Lat Phrao Station;
- Phetchaburi Station connected to ARL Makkasan Station, Asoke Pier, and Asoke Railway Halt (SRT);
- Si lom Station connected to BTS Sala Daeng Station;
- Hua Lamphong Station connected to Bangkok Railway Station (Hua Lamphong);
- Sanam Chai Station connected to Rajini Pier;
- Bang Wa Station connected to BTS Bang Wa Station and Bang Wa Pier;
- Phra Nang Klao Bridge Station connected to Phra Nang Klao Bridge Pier;
- Bang Son Station connected to the S.R.T. Red Line Mass Transit System and the long-distance Bang Son Railway Station;
- Tao Poon Station or the interchange station between the MRT Purple Line and the MRT Blue Line.



- The Company plans for and produces various styles of metro cards to suit every group of customers and to attract non-regular passengers to increasingly use the metro cards in travelling.
- The Company offered public relations via metro cards to corporate customers by customizing metro cards bearing specific logos or special events for public relations and sales promotion to distribute the metro cards to both current and new target customers.
- The Company strategically increased the number of the service users travelling with metro cards to ensure the convenience of their travelling and minimize physical contact by way of provision of privileges in the metro cards through collaboration with business alliances, e.g., discount on fees for metro card top-up, cash back and credit card point redemption, discounts at shops, department stores, theaters or events along the routes.
- Customer relationships have been formed and managed to ensure customers' satisfaction and retain the existing customer base by, such as, managing the passenger information system in the form of the MRT Club membership system, creating a good network and relationship with general service users through the Company's social media and public relations channels.
- Communication channels have been added to provide up-to-date, rapid and reliable service information, including public relations on destinations, to facilitate target customers' journey plans.
- The Company conducted annual survey of satisfaction, requirements and expectations of passengers for the purpose of improving the quality of services.

• JOURNEYS WITH METRO CARDS FOR THE MRT PASSENGERS

“Enjoy More Convenient and Rapid Journeys with the MRT Metro Cards” – The MRT metro cards are used to pay fares for journeys on the M.R.T. Chaloen Ratchamongkhon Line and the M.R.T. Chalong Ratchadham Line, and store value for multiple journeys, comprising 4 types of cards, Adult Card, Student Card, Elder Card and Child Card. The initial card value is Baht 180 (Baht 100 for fare, Baht 50 for deposit, and Baht 30 for issuance fee).

Metro cards for business entities customize special designs for various events to create the unique and outstanding metro cards for specific business, including such metro cards in collaboration with financial institutions as all-in-one ID, debit and metro cards.



In addition, the Company, in association with the SRT, supported the government policy to lessen people's cost of living through a 30-day unlimited journey promotion in the MRT Purple Line and the MRT Blue Line at a competitive price. Passengers holding the MRT PLUS and MRT metro cards in the form of Adult Pass, Business Pass and Co-Brand Pass may choose to top up their cards for journeys on the MRT Purple Line (PL Adult Pass), the MRT Blue Line (BL Adult Pass) or between the two lines (ML Adult Pass), with the details as follows:

o **PL Adult Pass:** used for traveling in the MRT Purple Line, which can be topped up at the ticket office of the MRT Purple Line, available from **February 1, 2021 - April 30, 2022:**

- 15 trips, Baht 450, averaging 30 Baht/trip
- 25 trips, Baht 700, averaging 28 Baht/trip
- 40 trips, Baht 1,040, averaging 26 Baht/trip
- 50 trips, Baht 1,100, averaging 22 Baht/trip
- 60 trips, Baht 1,200, averaging 20 Baht/trip

(**for travelling up to 60 days**)

(from the maximum fare of Baht 42)

o **BL Adult Pass:** used for travelling on the MRT Blue Line, which can be topped up at the ticket office of the MRT Blue Line, available from **March 1, 2021 - April 30, 2022:**

- 15 trips, Baht 450, averaging 30 Baht/trip
- 25 trips, Baht 700, averaging 28 Baht/trip
- 40 trips, Baht 1,040, averaging 26 Baht/trip
- 50 trips, Baht 1,250, averaging 25 Baht/trip

(from the maximum fare of Baht 42)

o **ML Adult Pass:** used for travelling between the MRT Blue Line and the MRT Purple Line, which can be topped up at the MRT ticket office for both the MRT Blue Line and the MRT Purple Line, available from **March 1, 2021 - April 30, 2022:**

- 15 trips, Baht 810, averaging 54 Baht/trip
- 25 trips, Baht 1,300, averaging 52 Baht/trip
- 40 trips, Baht 2,000, averaging 50 Baht/trip
- 50 trips, Baht 2,250, averaging 45 Baht/trip

(from the maximum fare of Baht 70)

The journey promotion is valid for 45 days after the date of purchase of the journey. If the deadline expires, it cannot be used for travel, and it can be used to travel for 30 days from the date of first trip (except for a 60-day and 60-trip PL Adult Pass, which will be valid for 60 days from the date of first trip). In addition, the journey promotion is non-refundable. As for Student card, a 10% discount is offered to students and a 50% discount is offered to children and the elderly for each single trip, as normal.





• **OPENING OF COMMERCIAL AREAS FOR MRT PASSENGERS’ CONVENIENCE**

The commercial areas are opened within the MRT Blue Line stations to provide services and convenience to the general public and the MRT service users, as follows:

- Metro Mall opens for service at 8 stations, namely, Kamphaeng Phet Station, Chatuchak Park Station, Phahonyothin Station, Phra Ram 9 Station, Thailand Cultural Centre Station, Sukhumvit Station, Phetchaburi Station, and Khlong Toei Station, every day from 6:00 a.m. to 2:00 a.m., except at Kamphaeng Phet Station which open only on Friday - Sunday from 7:00 a.m. - 10:00 p.m., with more than 170 stores available.
- Gourmet Market opens for service from 7:00 a.m. - 10:00 p.m. in the basement of the Park and Ride Building at Lat Phrao Station.
- J&T Express shop opens for service at 32 stations, receiving/delivering parcels every Mondays - Fridays from 7:00 a.m. to 8:00 p.m. and Saturdays - Sundays from 8:30 a.m. - 8:00 p.m.
- More than 200 automatic machines of various financial institutions are available inside the stations.
- The Temporary Passport Office, Department of Consular Affairs, opens for service at Khlong Toei Station, every Mondays - Fridays from 8:30 a.m. - 4:30 p.m.
- Activities and special price products at various stations such as Good Food Good Fair, Season Market Fair, Export Code Fair, School Welcome Fair.

• **PROMOTION AND CAMPAIGN FOR PEOPLE’S TRAVEL BY MRT IN 2021**

o **Songkran Day**

Activities on the occasion the Songkran Day, the National Elderly Day, and the Family Day, comprised two sub-activities, as follows:

- The **“Celebrating Songkran Day with MRT”** activity was held to provide the MRT passengers an opportunity to make merit under the Thai tradition during April 9 - 16, 2021 for blessing by performing a bathing rite for Buddha images at 19 MRT Blue Line stations and at 16 MRT Purple Line stations.
- **“Free MRT Ride for Elderly (60+)”** activity was held on April 13 - 15, 2021 by providing free rides for the elderly aged 60 or over throughout the service hours.

o **National Mother’s Day**

- The **“12 August, Free MRT Riding for Mom”** activity was held to provide mothers with free MRT journeys on August 12, 2021 throughout the service hours.

o **National Father’s Day**

- The **“5 December, Free MRT Riding for Dad”** activity was held to provide fathers with free MRT journeys on December 5, 2021 throughout the service hours.

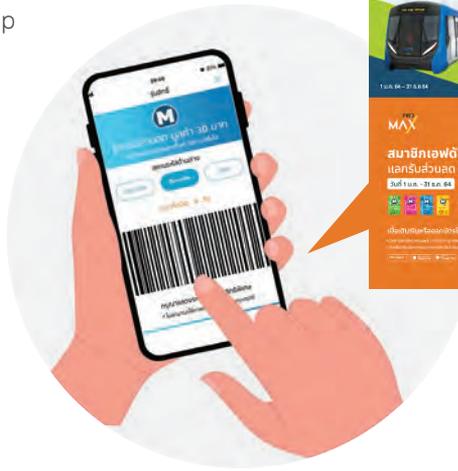
o **New Year’s Day**

- The **“MRT Extended Service Hours on New Year’s Day until 2 AM”** activity was held on the occasion of the New Year’s Day, whereby service hours were extended from 06.00 a.m. on December 31, 2021 until 02.00 a.m. on January 1, 2022.



DISCOUNT PRIVILEGES FOR TOP-UP VIA QR CODE SYSTEM

A method for obtaining top-up discount privileges at the ticketing room by scanning a QR code or Barcode has been developed. By this method, MRT ticket holders can present a code for collecting the privileges in the form of a QR code or a Barcode through the Application of each such privilege to rapidly and easily get the privileges, helping save the time spent filling out the claim form.



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DISTRIBUTION OF SOUVENIRS THROUGH ONLINE CHANNELS

M Shop souvenirs from MRT are available for collectors or as gifts for a variety of occasions. Passengers can choose to view product details or place orders conveniently via online channels at the website <https://metro.bemplc.co.th/MRT-Shop> or via Bangkok MRT Application, with home delivery service.

Not only that, but there are also amenities, such as restrooms, free Wi-Fi, waiting areas, and telecommunication services with 5G mobile phone signals inside both the stations and the trains, available for the MRT service users. During the situation of COVID-19, the Company has also implemented stringent measures to prevent the spread of the diseases in accordance with the government policies, by increasing the frequency of cleaning different areas, serving alcohol gel, ensuring that retail shop operators are vaccinated, wearing face masks and following the measures, while requiring the service users in the Metro Mall area to always wear face masks and check their body temperature before entering the Metro Mall area every time.

2 LAYER FACE MASK

- Water Repellent**
สารกันน้ำชนิดพิเศษที่ช่วยกันน้ำและกันคราบสกปรก
- Nose Wire**
มีสายรัดจมูกที่ช่วยป้องกันไม่ให้ลมหายใจรั่วออกและช่วยปรับให้หน้ากากแนบกับใบหน้า
- Anti-Bacterial**
ผ้าใยสังเคราะห์ชั้นในที่มีคุณสมบัติยับยั้งการเจริญเติบโตของแบคทีเรีย
- Adjustable Neck Strap**
สายรัดคอแบบปรับได้ ช่วยให้สวมใส่สบายและปรับให้พอดีกับขนาดศีรษะ

Outer Layer: 94% Polyester 6% Elastane
Inner Layer: 100% Melted Cotton

Head Wire: 52% Polyethylene 32% Aluminum
Cord: 70% Polyester 30% Elastic



• EXPRESSWAY EMERGENCY SERVICES

If an expressway user has an accident or engine failure on the expressway, rescue workers will assist in repairing the engine until it can continue to run, or if the problem cannot be solved, they will assist in towing the vehicle from the expressway to the nearest spot without any expense. Unless there is a need to replenish oil or there is cost of chemical powder to remove oil stains from the accident scene, namely, fuel cost in the event that the vehicle runs out of fuel, rescue workers will refuel the vehicle for Baht 100 so that it can be taken from the expressway and taken to a gas station; and chemical power cost in the event that the vehicle has a problem and there are oil stains flowing out on the road, staff need to use chemicals to remove the oil stains for the safety of other expressway users.

• DEVELOPMENT OF EMV CONTACTLESS PAYMENT SYSTEM

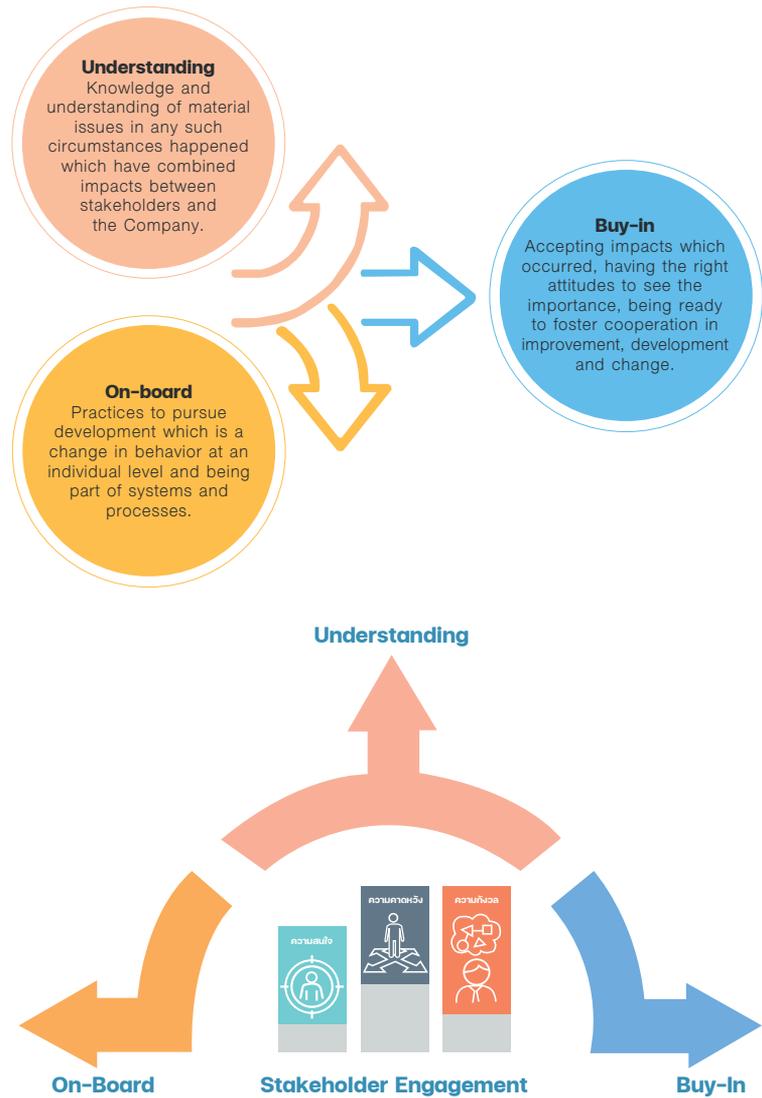
The Company has carried out technology development to ensure greater efficiency and convenience in the journey. To do so, the Company, in association with the Ministry of Transport, EXAT and Krung Thai Bank, developed an EMV Contactless toll payment system or Europay MasterCard and VISA, a payment system designed as an alternative to the existing toll payment for greater convenience for expressway users, simply tapping and paying tolls with a MasterCard or VISA credit or credit card of all banks embedded with contactless payment symbol. This is to reduce use and touch of cash while also minimizing the risk of the spread of COVID-19 and to serve as an international standard payment format. This system has been launched for 5 routes, namely, the Chalmr Mahanakorn Expressway (First Stage Expressway), the Si Rat Expressway (Second Stage Expressway), the Si Rat - Outer Ring Road Expressway (Chimplee - Chatuchak), the Udon Rattaya Expressway (Bang Pa-in - Pak Kret), and Kanjanapisek Road (Southern Outer Ring Road). In 2022, this is a plan to expand this service to the mass rapid transit system.

In addition, the project “Happy Journey with BEM” was organized to distribute face masks as giveaways in order to convey BEM’s concern to and build confidence for the expressway service users in travelling safely, without exposure to COVID-19, with fabric masks being distributed as giveaways to the service users of all 3 routes, namely, the Si Rat Expressway (Second Stage Expressway), the Udon Rattaya Expressway, and the Si Rat - Outer Ring Road Expressway, as well as public relations on the toll payment with the credit or debit card.

3.2.2 STAKEHOLDER ANALYSIS IN BUSINESS VALUE CHAIN

The Company has a clear policy in giving priority to and taking into account the rights of stakeholders by conducting the businesses with social and environmental responsibility as well as creating value added and maximum benefits to stakeholders of all groups in a fair and sustainable manner. The Company has classified the group of stakeholders as internal stakeholders and external stakeholders. The Board of Directors has stated in the corporate governance policy that the Company will take care of stakeholders under their legal rights, with a constant focus on operations with respect for human rights. Furthermore, the Company conducts its businesses by taking into account internal factors such as goals, organizational directions and business risks, which are used to formulate strategies in response to the Company’s key sustainability issues.

Balance: Stakeholders play a key role in enabling the Company to progress and grow sustainably. In any such crisis, understanding of the interests, expectations and concerns of stakeholders is then matter of importance, due to the fact that it will enable the Company to formulate responsive approaches to ensure a balance in creating shared value. To that effect, the Company then set out the operational guidelines for stakeholder engagement as follows:



Impacts on BEM	Material Issues	Impacts to Stakeholders
<ul style="list-style-type: none"> - Decrease in revenue - Business disruption - Negative impact on reputation/ Revoked License to Operate 	<ul style="list-style-type: none"> Operational Results Travel Safety 	<ul style="list-style-type: none"> - Creation of Value Added to Business - COVID-19 Infection - Injury and Fatality
<ul style="list-style-type: none"> - Operation suspension - Negative impact on reputation 	<ul style="list-style-type: none"> Work Safety 	<ul style="list-style-type: none"> - COVID-19 Infection - Illness and Fatality
<ul style="list-style-type: none"> - Stagnant business growth or possible business bankruptcy - Negative impact on reputation 	<ul style="list-style-type: none"> Good Corporate Governance 	<ul style="list-style-type: none"> - Unethical/Undisciplined Employees - Fraud/Corruption
<ul style="list-style-type: none"> - Tendency to pay higher tax (Carbon Tax) on use of energy and resources of various kinds 	<ul style="list-style-type: none"> Severe Climate Change 	<ul style="list-style-type: none"> - Impact on Services
<ul style="list-style-type: none"> - Failure to prevent risks or emergency situations - Business disruption 	<ul style="list-style-type: none"> Risk Management 	<ul style="list-style-type: none"> - Travel/Work-Related Injury / Fatality

1) Internal stakeholders



2) External stakeholders



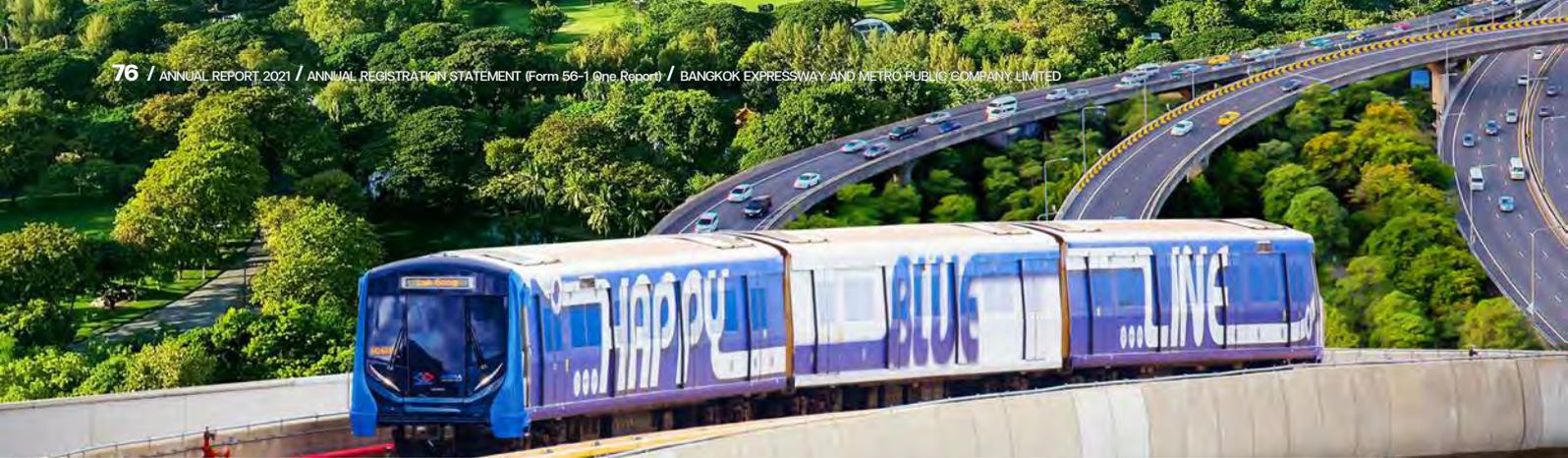
• STAKEHOLDER ENGAGEMENT

Stakeholders	Material Issues	Understanding and Buy-In	On-Board
MRT Passengers Expressway Users Communities	Travel Safety	Communication	Use of Services Participation in Activities Complaint and Suggestion Channels
Employees Counterparts	Work Safety	Policies, Measures, Provision of Knowledge and Training	Safety Awareness-Raising Internal Safety Activities
Executives Employees	Good Corporate Governance	Policies, Structures and Practices, Governance	Communication / Whistleblowing Channels and Whistleblowing Handling Practices on Ethics and Codes of Conduct
Employees Communities	Severe Climate Change Environmental Impact	Environmental Practices and Standards	Innovations in Operational Process Environmental Activities
Executives Employees	Risk Management	Training / Good Practices	Operational Risk Management at All Levels

• ASSESSMENT OF STAKEHOLDER GROUPS

The Company has assessed groups of internal and external stakeholders which are all related to the operations of the organization. This is considered a critical process that will aid in building trust between stakeholders and the Company, including long-term confidence in the Company’s appropriate treatment and care of all groups of stakeholders.

Groups of Stakeholders	Communication Channels	Frequency	Expectations/Concerns	Responsive Actions
 <p>Traders / Contractors</p>	<ul style="list-style-type: none"> - Quality and job satisfaction evaluation - Communication through the Company's website at procurement menu - Taking tour of production process 	<p>From time to time All year round</p> <p>From time to time</p>	<ul style="list-style-type: none"> - An equal procurement procedure - Fairness to traders at all levels, and systematic operations in accordance with contract terms, and fair agreements 	<ul style="list-style-type: none"> - Establishing the criteria for selection of traders - Ensuring equal and fair competition - Preparing contracts or agreements in appropriate and fair forms - Arranging for management, monitoring, surveillance, and rechecking systems to ensure the full compliance with contracts or agreements - Providing the internal control system to prevent corruption and misconduct at every step - Paying consideration to traders on time in accordance with terms of payment as mutually agreed - Having a policy not allowing directors / executives and staff to solicit any benefit from traders - Evaluating traders on a yearly basis and informing them of the results of the evaluation with suggestions
 <p>Lenders / Debenture holders</p>	<ul style="list-style-type: none"> - Debenture holders meeting - Disclosure of various information through the Company's communication channels 	<p>From time to time All year round</p>	<ul style="list-style-type: none"> - Strict and complete compliance with the conditions of credit facilities agreements, guarantees, and capital management 	<ul style="list-style-type: none"> - Strictly and completely Complying with various mutually agreed upon conditions of the credit facilities agreements - Preparing accurate, complete and reliable financial information reports - Assuring that any information relating to corruption at work will be shared with the lenders so that the concerns will be jointly resolved equitably and expeditiously
 <p>Society, communities, schools adjacent to the expressways and the MRT routes</p>	<ul style="list-style-type: none"> - Meeting to Listen to Opinions - Csr Activity - Activity Assessment - Community Visit - Receiving Complaints - Collaboration with the Government in the Construction of Community-Beneficial Initiatives 	<p>From time to time At least 12 times a year All activities From time to time All year round From time to time</p>	<ul style="list-style-type: none"> - Business operations by taking care of safety and social and environmental impact - Fast communication in case of various emergencies 	<ul style="list-style-type: none"> - Supporting activities which are in the public interest - Raising awareness among employees of voluntary actions for community and social benefits - Creating a community structure in terms of education, environment, quality of life, sports and public benefit



3.3 SUSTAINABILITY MANAGEMENT IN ENVIRONMENTAL DIMENSION

3.3.1 ENVIRONMENTAL POLICIES AND PRACTICES

In respect of environmental management and environmental impact reduction (More Quality and Less Impact), the Company's business operations has taken into account three aspects of sustainable development, namely, 1. Environment, with an emphasis on preventing and controlling pollution; 2. Society, by ensuring that the source of happiness is protected in order to have a good quality of life, ready to pass on the value to the society nearby and as a whole; and 3. Corporate Governance, by adhering to ethics, integrity, and transparency in the business operations while striving for development of the quality of services committed to environmental responsibility. Therefore, the Company has established an environmental policy available at www.bemplc.co.th, which has been internally communicated to executives and staff, and externally communicated to third parties.

In addition, with a commitment to conducting the businesses in an eco-friendly manner, creating a good quality of life for employees, service users, as well as the society surrounding the expressway and MRT routes, including stakeholders of all groups, the Company has thus improved, reviewed internal operating processes to make them compliant with environmental requirements. The following are the environmental management and administration guidelines prioritized by the Company:

1. Focusing on pollution prevention and control to meet international standards and taking into account the environmental impact of service users, employees and communities in order to have the least possible impact on the environment and in accordance with the law.
2. Educating and encouraging staff and contractors, including those involved, of the roles, duties and responsibilities regarding environmental impact prevention, and promoting the optimal use of natural resources.
3. Performing duties in accordance with the law and other requirements related to environment.
4. Reviewing objectives and goals, measures for pollution prevention and control, and environment protection to ensure that they have been implemented for continual improvement, as well as the efficient and cost-effective use of resources.
5. Publicizing the environmental policy to the public and all concerned parties.

This policy is a part of the Company's operations. It is then the responsibility of all employees and partners to earnestly and consistently implement the policy in order to maintain good environmental quality and to continue to take care of the society in all groups, in terms of management, good performance, creating added value for shareholders and giving priority to service users, employees, business partners, communities surrounding the expressway and MRT routes on a continuous and sustainable basis.

3.3.2 ENVIRONMENTAL PERFORMANCE

In 2021, the Company carried out environmental operations by focusing on prevention and control of potential pollution and impact, along with energy conservation, in the three businesses, namely expressway business, rail business, and commercial development business.

• EXPRESSWAY BUSINESS

The expressway service operation was commenced when the Company was granted a government concession to carry out construction, with the Company being well aware that as soon as the construction start, it would have an impact on biodiversity and the environment in term of dust, noise, and other pollution, or even when the construction is completed and ready for public use, execution in terms of maintenance and repair, as well as the traffic volume on the expressways, are all harmful to the environment. Based on this reason, the Company has attached great significance to pollution prevention and control as a result of such impacts, by devising the environmental policy which prioritizes pollution protection and control as well as continuing to enhance staff and stakeholders' knowledge and understanding as to environmental management.

Starting from the construction of the expressway, the Company has complied with the pollution prevention measures in accordance with the standards and requirements established by the National Environment Board and other relevant laws, which is deemed a part of the agreement. In this regard, measures, including various methods have been properly adopted, for example, in the construction in urban areas with large populations,

the cutting-edge Segmental Box Girder technology which has been accepted internationally and according to AASHTO (American Association of State Highway Transportation Officials) standards, has been used, thereby having a minimal impact on ground floor traffic, lessening dust and noise problems during construction, ensuring construction according to plan without opposition from society and communities, while ensuring the safe and standard expressways which meet the requirements of travel on an efficient basis, as well as helping minimize environmental impact from the Company's operations. Furthermore, the Company's previous operations have never been detrimental to the environment.

The Company continues to maintain the ISO 14001 Environmental Management System, by monitoring important environmental concerns which may occur, as well as optimizing the use of natural resources through its continuous energy management measures. The Company has also obtained certifications of the ISO 9001: 2015 Quality Management System and the ISO 14001: 2015 Environmental Management System from SGS (Thailand) Limited, for the expressway business.

1) Energy Management

The Company has installed a solar cell power generation system at 3 points, namely, the Si Rat-Outer Ring Road Expressway Control Center (CCB7), the Udon Rattaya Expressway Control Center (CCB5), and the Si Rat-Outer Ring Road Expressway Toll Plaza Building, with 9 toll plazas.

CCB7 where the solar cell system installation was completed on March 21, 2020, thereby resulting in a reduction of the purchase of electricity from EGAT at a 75 kilowatt-peak of Solar Cell panel (kWp). According to the following up results of the solar cell system's power generation in 2021, 113,366 kWh of electricity could be

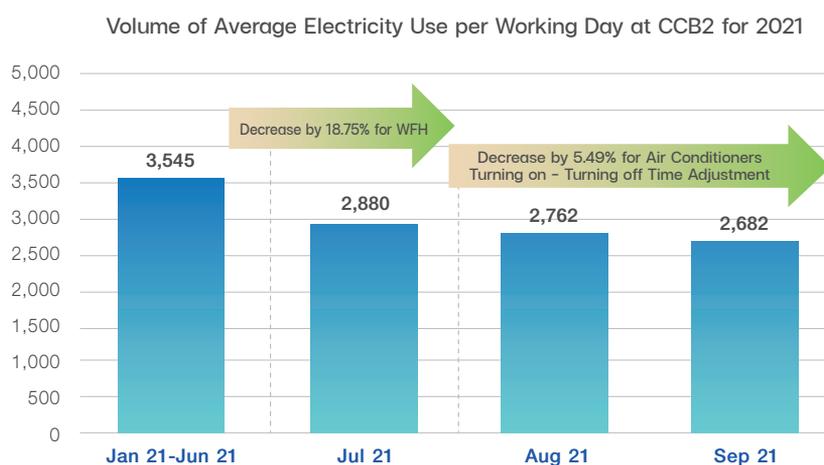
generated, which was 3.5% more than previously calculated (i.e., approximately 109,500 kWh per year), and the break-even point would be reached within 7 years and 8 months, or thereby saving about 17% of energy while also helping minimize CO₂ emissions by approximately 65,899.65 kg or 65.89 tons/year.

CCB5 where the solar cell system installation was completed on September 4, 2021, with an aim of lowering the cost of purchasing electricity from EGAT at a 50 kilowatt-peak of Solar Cell panel (kWp). Based on the calculation, if it could generate electricity of approximately 73,000 kWh per annum or 200 kWh per day, the break-even point would be reached within 7 years and 11 months, or thereby saving about 15% of energy while also helping minimize CO₂ emissions by approximately 42,434.9 kg or 42.43 tons/year.

Si Rat-Outer Ring Road Expressway Toll Plaza Building, with 9 toll plazas where the solar cell system was installed with an aim of lowering the cost of purchasing electricity from EGAT at a 25 kilowatt-peak of Solar Cell panel (kWp) for each toll plaza. According to the following up results of the solar cell system's power generation in 2021, 294,514 kWh of electricity could be generated, which was 1.83% less than previously calculated (i.e., approximately 300,000 kWh per year), and the break-even point would be reached within 6 years and 11 months, or thereby saving about 25% of energy while also helping minimize CO₂ emissions by approximately 171,200.98 kg or 171.2 tons/year.

Moreover, In 2021, the Company also developed an automatic air conditioning control system in the office buildings, with the air conditioning system opening 15 minutes before the start of working hours and closing 15 minutes before the end of working hours, to ensure energy saving.

Electricity Use Comparison After Opening-Closing Time Adjustment of Air-Conditioner



The following two factors contributed to the decrease in average electricity use per working day:

1. Work from home measure, starting from July 13, 2021 onwards, as a contributing factor in decrease in electricity use; and
2. Reduction of the use of air conditioners by changing their turning on - turning off time, starting on July 23, 2021, thereby resulting in decrease in electricity use of 18.75% and 5.49%, respectively.

Remark: In July 2021, electricity use was calculated as the average working day for the whole month without dividing by the start date of Work from Home and air conditioner turning on - turning off time adjustment.

2) Environmental Management

According to the monitoring and inspection of compliance with environmental impact prevention and correction measures and environmental impact monitoring measures, including noise impact in the area near the right of way of the expressway routes and toll plazas on the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway and the Udon Rattaya Expressway under the management by Bangkok Expressway and Metro Public Company Limited during July-December 2021, it was found that that the projects had strictly complied with environmental impact prevention and correction

measures and environmental impact monitoring measures, together with the environmental impact assessment as approved by the Office of Natural Resources and Environmental Policy and Planning, whereby they had fully complied with the measures specified in the standard, including air quality, noise, water quality in water supply canal, vibration, economy and society. In this regard, United Analysts and Engineering Consultants Co., Ltd., as a project environmental consulting company, was assigned to conduct environmental impact monitoring, namely: 1. Ambient air quality; 2. Noise level in general; and 3. Water quality in the water supply canal.

• Air Quality Management

The results of monitoring ambient air quality around the expressway area during August - December 2021 as follows:



Monitoring Items	Average	Monitoring Spots	Pollutant Concentration (mg/m3)
1. Total dust particles	24 hrs.	7 spots	0.031-0.100
2. Carbon Monoxide	1 hr.	7 spots	1.1973-3.1477
3. Total Hydrocarbon gas	1 hr.	7 spots	0.9550-3.2850
4. Sulfur Dioxide	24 hrs.	7 spots	0.0014-0.0039
5. Nitrogen Dioxide	1 hr.	7 spots	0.0054-0.0545
6. Lead	24 hrs.	11 spots	<0.002-0.058 (microgram/ m3)

The results of monitoring ambient air quality can be summarized that the pollutant concentration is not above the standard under the National Environment Board's Notification on Ambient Air Quality Standards which has been published in the Government Gazette.

• Noise Management

The results of monitoring noise level which may have an impact on households adjacent to the right of way of the expressway routes and toll plazas during October 2021 as follows:



No.	Noise Level Measurement	Decibels (dBA)
1	24-hour average noise level	51.2-67.2
2	Noise level at 95 %	34.4-67.5
3	Noise level at 50 %	38.1-69.0
4	Noise level at 10 %	46.1-72.1
5	Noise level at 5 %	41.6-74.6
6	Maximum noise level	52.3-91.9
7	Day and night average noise level	55.5-72.3

The results of monitoring noise level which may have an impact on householders can be summarized that the average noise did not exceed the standard under the National Environment Board's Notification on Standard Sound Level published in the Government Gazette. In this regard, if any area with noise level above the standard is detected, the Company will implement measures to carry out noise level measurement, inspect information, and assess the cause in order to take appropriate remedial actions.

- **Water Quality Management**

According to the results of monitoring water quality in the water tap canal adjacent to the right of way of the Si Rat Expressway (Second Stage Expressway and toll plazas during August-December 2021, at 6 spots, the lead content index was <0.003-0.004 mg/l. The results of monitoring are in accordance with the water quality standards in water resources in category 3 under the National Environment Board's Notification on Water Quality Standards in Surface Water Sources, which has been published in the Government Gazette. Furthermore, the results of the lead measurement were confirmed to be consistent after a cross-check of information from the Metropolitan Waterworks Authority at its monitored stations.

3) Pollutant Management

To minimize the impact of air pollution, the Company has improved and developed services and products of the expressway business as the following:

- **Easy Pass Lane Improvement**

The Company has improved the Easy Pass lanes on the Si Rat Expressway at a total of 32 toll plazas, for 72 lanes, as fast lane to facilitate faster passage, helping reduce waiting time and the volume of traffic accumulated in front of toll gates, while diminishing air pollution. A vehicle which uses Easy Pass can minimize carbon dioxide (CO₂) emissions by 243.03 tons/year

- **Improvement of Cash Toll Lanes to Support the EMV Contactless Payment**

The Company has improved cash toll lanes on the Si Rat Expressway, the Udon Rattaya Expressway, and the Si Rat - Outer Ring Road Expressway to support the EMV Contactless payment, at a total of 51 toll plazas, for 173 lanes, in order to facilitate faster passage, as an alternative to toll payment with a credit or debit card, reducing cash exposure and the risk of the spread of COVID-19. The system is launched for service at 5 routes, namely, the Chalerm Mahanakorn Expressway, the Si Rat Expressway, the Si Rat - Outer Ring Road Expressway, the Udon Rattaya Expressway (Bang Pa-in - Pak Kret), and Kanjanapisek Road (Southern Outer Ring Road). A vehicle which uses the EMV system to pay for tolls can minimize carbon dioxide emissions (CO₂) by 1.96 tons/year

- **RAIL BUSINESS**

The Company has continued to doing the environment related activities in accordance with work on the environment under the ISO 14000 standard, by carrying out pollution prevention and control, reduction of environmental impact, and sustainable use of resources based on sustainable development in 3 areas: Environment, Social and Corporate Governance. Moreover, the Company has reported on the operating results in conformity with the energy and environmental conservation performance indicators in accordance with the guidelines of the Energy Conservation Promotion Act (No. 2) B.E. 2550 (2007), the Ministerial Regulation Prescribing Standard, Criteria, and Energy Management Procedures in Designated Factories and Buildings B.E. 2552 (2009), including operating under the energy management manual for sustainable development.

Regarding the main mission to that the Company is committed to providing a safe, convenient, fast, reliable, punctual, and efficient mass transit system service as a means to improve the people's quality of life, enhance the quality and efficiency of the modern and integrated transportation network which will help alleviate traffic problems, protect the environment, and further develop society and the nation, the Company has therefore established the environmental and energy-saving policies to ensure that the environmental protection implementations and actions have been carried out in the same direction.

1) Energy and Environment Management

The Company has strictly complied with relevant government laws, namely, energy conservation and environmental laws, and has also adopted the Energy Management Systems-Requirements with Guidance for Use (ISO 50001) standard, including the International Environmental Management System (ISO 14001) standard, from the opening of the MRT system, while simultaneously undertaking activities for engagement and listening to opinions of stakeholders, in order to create the correct knowledge and understanding for attaining sustainable development. To that end, the following standard certifications have been granted to the Company:

- ISO 9001 : 2015 Quality Management System ;
- ISO 14001 : 2015 Environmental Management System ;
- ISO 45001 : 2018 Occupational Health and Safety Management System

In addition, the Company has paid attention to the potential environmental impact from the MRT services so as not to be harmful to the environment, quality of life, and livelihood of the people and communities nearby, by strictly monitoring, preventing and mitigating the environmental impacts in accordance with the Environmental Impact Mitigation Measures and Monitoring Program (EMP), during the operation of the MRT projects in service, namely, the M.R.T. Chaloem Ratchamongkhon Line Project, the M.R.T. Chalong Ratchadham Line Project, and the MRT Blue Line Extension Project Bang Sue - Tao Poon Station as well as submitting a report on the implementation of the measures to the Office of Natural Resources and Environmental Policy and Planning (ONEP) to consider twice a year. The inspection and monitoring of the environmental qualities in key environmental issues are as follows:

- 1) **Air Quality:** The results of air quality measurement in the atmosphere around the projects showed that the total suspended particulate (TSP), particulate matter (PM10) and Carbon monoxide (CO), Nitrogen dioxide (NO₂), and the total Hydrocarbons (THC) met the standard requirements.
- 2) **Air Quality in MRT Stations and Trains:** The results of air quality measurement in the MRT stations and trains, during both peak and off-peak hours, showed that the total bacterial and fungal volume, ventilation rate, temperature, and relative humidity met the standard requirements.
- 3) **General Noise Level:** The results of general noise level measurement showed that the average noise did not exceed 70 dB(A), with the maximum level not exceeding 115 dB(A), which met the standard requirements.
- 4) **Vibration Level:** The results of vibration level measurement met the standard requirements.
- 5) **Effluent Quality:** The results of effluent quality measurement in stations, depot and administration building met the standard requirements. The wastewater treatment system could work efficiently according to its design.
- 6) **Waste Management:** The results of waste management were found that segregation, storage, collection and transport of waste for disposal were made efficiently in accordance with applicable laws.

In addition to the environmental quality measurements, maintenance vehicles used in the Depots area also feature an engine system which meets EURO IV, the vehicle emission standard. This ensures that usage of repair and maintenance vehicles will not cause dangerous-level pollution.

o The M.R.T. Chalong Ratchadham Line Project

• Green Area Project

The MRT project is heavy mass transit project which requires an Environmental Impact Assessment Report (EIA) and implementation of the Environmental Impact Mitigation Measures and Monitoring Program (EMP) as approved by the Office of Natural Resources and Environmental Policy and Planning (ONEP) and the National Environment Board.

As a result, during the operational phase, the Company has implemented measures and programs to expand green space along the MRT routes in order to minimize air pollution, lessen impacts on scenery, while softening the view of the metro structures.



o The M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line Extension, Hua Lamphong - Lak Song Section)



2) Greenhouse Gas and Carbon Dioxide Emission Reduction Management

The Company gives priority to management for reduction of greenhouse gas emissions, by observing the environmental and energy conservation policies. For such purpose, the Company will regularly devise new guidelines for improving, changing, and implementing energy-saving projects every year to lighten environmental pollutions and ensure the efficient use of energy while also lowering the Company's electricity costs, due to the fact that the electricity consumption of the management business of the mass rapid transit system projects constitutes the majority of costs of the Company; therefore, the Company formulated its energy saving measures in 2021 to reduce energy consumption, conserve the environment and minimize Carbon dioxide (CO₂) emissions. In this regard, the Company has prepared its corporate greenhouse gas emissions information, with the Safety and Quality Group serving as an intermediary in coordinating, collecting and verifying the accuracy of information.

The Company attaches importance to reduction of energy consumption for the purpose of environmental conservation because the environment is everything around us, comprising water, air, sunlight, including assorted resources, e.g., forests, soils and minerals, etc., all of which have an influence on human life. The Company then takes part in the nature conservation to ensure the availability of the country's nature. To that end, the sustainable and continuous guidelines have been implemented by the Company, as follows:

1. Reasonably reaping the benefits from the nature, such as, planting trees around buildings to reduce the heat temperature of natural light shining off buildings, thereby functioning the air conditioners in a more economical way, etc.
2. Sparingly using energy generated from natural resources, such as, helping save electricity by turning it on when it is needed only and focusing on use of natural daylight, saving oil fuel, using tap water wisely by watering the plants with the used water, and campaigning for turning faucets off when not in use, etc.

3. Helping preserve the air environment by reducing air pollution, such as, not burning garbage or not taking any other action causing air pollution, and inspecting the engine condition of the Company's vehicles to make sure they are in a normal condition so as not to release toxic fumes into the air, etc.
4. Helping conserve natural resources because natural resources are all beneficial to human beings in terms of consumption and utilization, therefore, helping conserve our nature by using other materials in place of using natural resources, such as, reducing the use of foam as much as possible, the use of cloth bags instead of plastic bags and not littering and not discharging wastewater into natural canals, and the use of solar energy for water treatment in natural canals, among other things.
5. Formulation of work plans for maintenance of machinery equipment in accordance with the environmental and energy conservation policies.

The Company has implemented various measures, for example, promotion and public relations measures, control measure, and technical change measures, etc., and has continuously studied and developed for the purpose of efficient energy use. Over the past years, the Company has properly provided the opening-closing control systems in place, such as lighting system, escalator system, and air conditioning system, and so forth, and has replaced energy-saving light bulbs at the MRT stations, including at the Depots, as well as the use of solar energy for water treatment in natural canals, and so on, thereby having a profound effect on the Company and reducing Carbon dioxide (CO₂) emissions. The following are action plans and activities implemented in 2021:



Generation of electricity from solar energy for water treatment in natural canals

1. Replacing the existing light bulbs with efficient light bulbs (LED bulbs) in the MRT stations and the Depot, the MRT Blue Line Project, thereby reducing Carbon dioxide (CO₂) emissions by 1,956 tCO₂e/year.
2. Replacing the existing light bulbs with efficient light bulbs (LED bulbs) in the MRT stations and the Depot, the MRT Purple Line Project, thereby reducing Carbon dioxide (CO₂) emissions by 600 tCO₂e/year.
3. Generating electricity from solar energy for water treatment in natural canals in the Depot area of the MRT Purple Line Project in place of the use of electricity produced from 100% fuel, thereby reducing Carbon dioxide (CO₂) emissions by 11 tCO₂e/year.
4. Controlling turning on and off the seasonal air conditioning system (cold season) in the area of the MRT Blue and Purple Lines so that the use of electric power is according to the actual use and the season, to ensure the efficient energy use, thereby reducing Carbon dioxide (CO₂) emissions by 188 tCO₂e/year.

The Ongoing activities undertaken every year:

1. Continual review of the operation process in terms of policies, goals, operational plans and internal and external audits, to achieve efficiency in the operation process.
2. Improvement of the train timetable to make them commensurate with the increasing number of passengers during the period of public relations in order to encourage everyone to save energy in the pursuit of sustainable development.
3. Water is one of the resources which the Company greatly values and appreciates; the Company has then chosen to install the electric train cleaning systems which are capable of recycling used water, that is, such systems can recycle used water by up to 3 cubic meters, and the Company has also applied the aforesaid cleaning systems from the commencement of the metro service until now.

In the implementation of environmental and energy conservation, the Company has strictly complied with relevant government laws, namely, environmental and energy conservation laws, Moreover, the Company has been granted the certification of management according to the International Environmental Management System (ISO 14001) standard, and adopted the Energy Management Systems-Requirements with Guidance for Use (ISO 50001) standard from the opening of the MRT system, to alleviate traffic problems as well as conserving the environment.



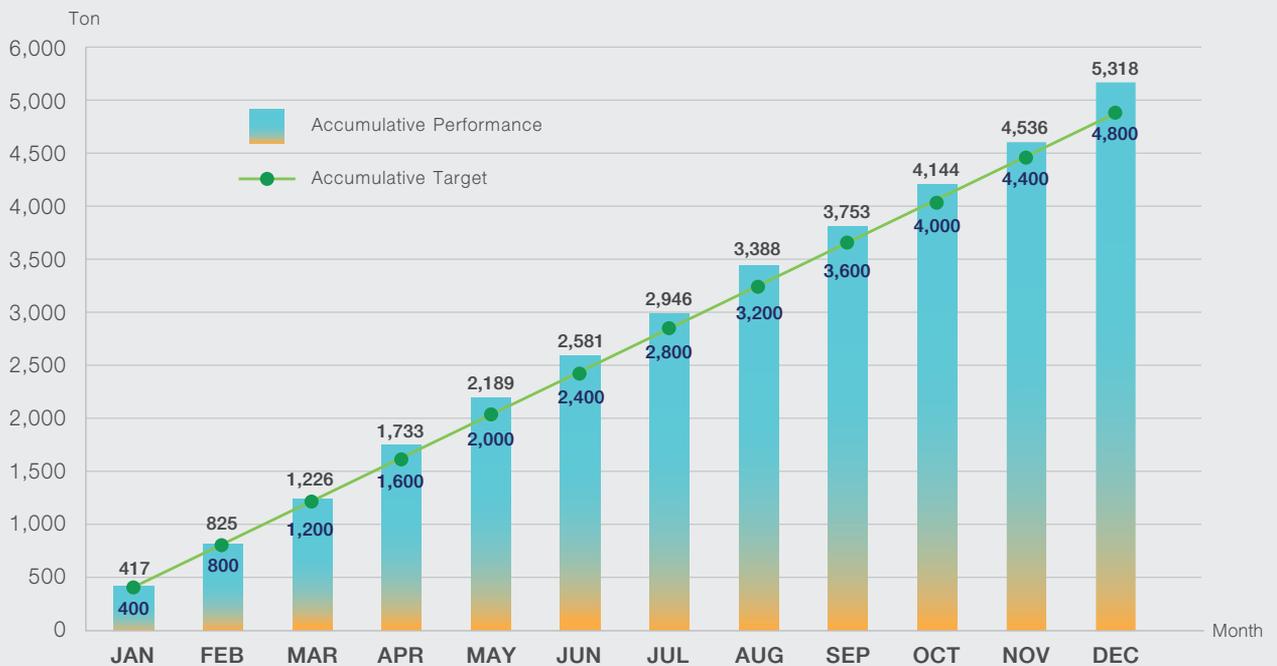

3) Water Management

Water is one of the resources which the Company greatly values and appreciates; the Company has then chosen to install the electric train cleaning systems which are capable of recycling used water, that is, such systems can recycle used water by up to 3 cubic meters, and the Company has also applied the aforesaid cleaning systems from the commencement of the metro service until now.

4) Waste Management

The waste generated within the Company has continued to manage by categorizing waste into general waste, biodegradable waste, hazardous waste, infectious waste, and recyclable waste, in order to ensure that each type of waste is properly disposed of and to reduce waste disposal expenses. By such method, recyclable solid waste can be also reused, such as in the production of bio-fertilizers, the reuse of one-sided paper, and so forth; and in addition, the recycled garbage can be processed for reuse, thereby contributing to reduction of the accumulated Carbon dioxide (CO₂) emissions to 5,318 tons in December 2021, which met the set target.

Reduction of CO₂ Emissions from Environmental Promotion Projects (ton)



Waste management was carried out through the following projects:

One Cap One Dream to Share Prosthetic Leg Project: To collect aluminum waste in order that they are recycled into materials in the production of prosthetic legs for mobility impaired persons, in collaboration with the Prostheses Foundation of H.R.H the Princess Mother and the Pollution Control Department.



Delivery Plastic Home Project: To collect plastic bottles in order that they are delivered to the Pollution Control Department in jointly contributing to the Prostheses Foundation of H.R.H the Princess and then delivered to Wat Chak Daeng to be transformed into monk robes and PPE kits for medical personnel.



PRECIOUS WASTE Projects:

- The paper box donation project, to produce paper field hospital beds for COVID-19 patients = 356 kg.
- The PRECIOUS WASTE project, to collect and distribute recycled waste as a means to conserve the environment and bring benefits to society in various forms on a continuous basis = 2,351.16 kg.
- The sorting plastic bottles to help doctors project, by donating plastic bottles (plastic bottles, stretchy plastic bags) in order that they are recycled into medical PPE kits made from plastic bottles = 2,537.96 kg.



Garbage Gang Project: To collect beverage boxes, such as milk cartons and fruit juice cartons, in order that they are recycled into Eco Board to be used as a substitute for wood in the production of school supplies, for example, table and chair sets, which will be then donated to schools in need, in collaboration with the Beverage Carton by Fiber Pattana Company Limited.

COMMERCIAL DEVELOPMENT BUSINESS

The Company also pays attention to environmental impact on the retail store floor in the MRT system so as not to be harmful to the environment, quality of life, and livelihood of the people and communities.





3.3.3 Overview of Energy Consumption and Environmental Conservation

The Company has an energy consumption monitoring system in place to ensure that energy consumption, such as consumption of fuel, electricity, tap water, paper, and waste, can be effectively controlled or reduced, by establishing the Energy Conservation Committee targeted and assigned to monitor monthly energy consumption and prepare a summary report to the Management Team. The energy consumption results in 2021 are as follows:

Category	Measurement Unit	Resource Consumption in 2021				Results of Resource Consumption in Comparison with Target
		Target	Expressway Business	Rail Business	Total Actual Consumption	
Oil consumption	liter	-	602,485.15	153,135.00	755,620.15	
Electricity consumption	kWh	-	17,128,525.20	190,052,615.00	207,181,140.20	Decreased by 1.91% from the previous year
Tap water consumption	m3	-	61,447.50	474,888.00	536,335.50	Decreased by 20.22% from the previous year
Paper consumption	sheet	3,133,800.00	1,059,240	1,485,000.00	2,544,240.00	Paper consumption decreased by 18.81 percent compared to the target
Non-hazardous garbage and waste	kilogram	-	-	94,685.00	94,685.00	Decreased by 11.12% from the previous year
Hazardous garbage and waste	kilogram	-	-	65,880.00	65,880.00	Decreased by 37.36% from the previous year
Greenhouse gas emissions	tons per year	-	9,956.81	115,432.18	125,388.99	Decreased by 5.35% from the previous year

Remark: The targeted electricity consumption is set for only office buildings which can manage to reduce electricity consumption. As for the consumption of electricity in MRT operation, MRT stations, lighting on the expressways and toll plaza buildings, it is necessary to consider the safety of the service users as a primary concern.

3.4 SUSTAINABILITY MANAGEMENT IN SOCIAL DIMENSION

3.4.1 SOCIAL POLICIES AND PRACTICES

1) HUMAN RIGHTS

The Company has adopted a policy to support, respect and uphold human rights, by treating all stakeholders, including staff, nearby communities, and society, with respect and taking into account the equality and equal liberty, non-violating of fundamental rights or discriminating on the basis of race, nationality, religion, language, skin color, gender, age, education, physical condition, or social status, as well as to ensure that the Company's businesses are not involved in human rights violations such as the use of child labor, and so on. Moreover, the Company has promoted the monitoring of compliance with human rights obligations and the fair treatment towards labor, by allowing them to take part in expressing their opinions and providing channels for their complaints through the Human Resources Department or the department to which the whistleblowers are directly reported.

Policy on Respect of Laws and Human Rights Principles

The Company makes it mandatory for directors, executives and staff to comply with the laws and human rights principles or human dignity, regardless of race, color, sex, language, religion, social origin, property, birth, political opinion, or any other status, as well as realizing their own rights, duties, and responsibilities towards society and others. In the preparation of the policy, the Thai labor standard practical guidelines, social responsibility of Thai businesses of the Ministry of Labor, have been adopted. The practical guidelines are as follows:

1. The Company strictly complies with the laws and human rights principles and does not support any business which violates human rights.
2. The Company treats all staff equally, without discrimination in terms of employment, remuneration, training, promotion, termination or dismissal due to sex, race, color, religion, age, marital status, pregnancy, political opinion, or disability, as well as supporting employment of the underprivileged persons.
3. The Company allows all staff to enjoy equal rights for work pursuant to rules, regulations, notifications, and orders of the Company.
4. The Company has devised an employee engagement development plan to ensure that all employees have a sense of belonging to the organization's same family. In the past year, the target average staff engagement score was not less than 85%.

2) OCCUPATIONAL SAFETY AND HEALTHY

The Company realizes and gives priority to the safety and hygiene of the business premises to ensure staff's quality performance and quality of life with safety and hygiene at work, by setting out the policy as follows:

1. The Company formulates measures to prevent any work-related accident, injury and illness through sincere cooperation among all staff as well as restrict and cope with safety risks arising from undertaking work under the normal operating process.
2. The Company formulates measures to design tools and equipment, set out practices, provide for training and supervise operations by taking into account safety for life, hygiene and property of staff and that of the Company as a whole.
3. The Company arranges an annual workplace safety inspection to look for risks and manage the environment and hygiene in the workplace to ensure safety for life, health and property of employees and the Company.
4. The Company prioritizes safety and hygiene of service users by providing training for employees in charge of working at toll plaza buildings, and employees who regularly perform rescue work and traffic management on the expressways, to ensure that they can perform their duties efficiently and safely in accordance with national laws and safety standards.
5. The Company attaches importance to emergency preparedness by organizing annual fire and evacuation drills to ensure that employees have acknowledged how to behave properly and safely in the case of an emergency.

Furthermore, during the situation of the pandemic of the Coronavirus Disease 2019 (COVID-19), the Company has implemented three key measures to prevent the spread of the disease, namely, preventive, remedial, and communication measures, with the aim of reducing employees' risk exposure and allowing the business continuity with efficiency. Currently, all employees (100%) in the Company have been vaccinated for 2 doses and the Company has also launched a campaign to ensure that all employees (100%) receive a third booster dose of vaccination by 2022.

3) EMPLOYEE CARE AND DEVELOPMENT

- **Labor Practices**

An employee is regarded one of the cornerstones of moving businesses forward with sustainability; thus, the Company's commitment to creating a path of happiness must begin with "the Source of Happiness," which refers to the Company's employees, in order that employees can deliver quality services and bring happy smiles to service users.

The Company firmly believes that qualified staff is a key factor in bringing the sustainable growth and success to the organization, the Company has thus clearly formulated the personnel development policy in order to ensure that personnel management is conducted efficiently and appropriately, with such policy being reviewed and developed in conformity with the Company's visions and current circumstances. In 2021, the Company reviewed and improved the personnel development policy in 2 major areas, as follows:

- **Creation of Organizational Culture**

The Company has aimed to provide the expressway and metro services with efficiency and continuous development, the Company has therefore fostered the conceptions and practices in various aspects, whether it be awareness of safety or awareness of accountability and responsibility, which are communicated via the operating process and with support of supervisors until attaining the organizational culture. This is to rest assured of all staff's practices and behavioral expressions in accordance with the Company's goals.

- **Management of Work Competency**

An employee is regarded as an invaluable resource which will contribute substantially to the Company's endless evolution and business competitiveness, and as such, the Company has planned to develop competency of staff at all levels by establishing core competency, performance competency and managerial competency of each work position, performance evaluation process and training provision as suitable for staff according to his/her work position, duties and responsibilities, to ensure staff's in-depth and extensive expertise, resulting in the Company's competency in moving its businesses forward to be the fully-integrated transportation service provider in Thailand and ASEAN.

Such personnel development policy covers a wide range of procedures, beginning with the recruitment of enough new employees for business expansion, the development of new and existing employees' knowledge and abilities, the appropriate adjustment of the work nature, including the proper employee transfer based on their knowledge, abilities, until the additional opportunity for their career advancement.

The Company is always determined to take care of employees at all levels in each and single aspect, whether job characteristics, occupational safety, health and working environment, or training and development of their skills in various fields, including provision of fair opportunities and career advancement, with fair remuneration and welfare, through the formulation of clear criteria for career growth and paths, with fair and appropriate remuneration, comparable to that offered by other companies in the same industry, as well as fostering a participatory and collaborative work atmosphere, while also ensuring a safe and sanitary workplace, and giving employees opportunity to show their potential, etc.

As a result of the aforementioned significance and development of employees, employees are content to work with the Company while also being inspired to work toward the achievement of the Company's goals. Other than this, with the underlying notion that employees are regarded as valuable resources and the Company's trust in their inherent potential, employees are proud of their works and committed of continuing improvement of their performance.

- **Staff Remuneration**

In order to determine the appropriate and competitive remuneration to maintain the good and competent staff to work with the organization, the Company then participates in the surveys of wages and remuneration to compare those offered by the Company with those offered by labor market and other companies in the same sector, as well as reviewing the starting salary for new graduates and base salary based on the value of work via the institute conducting wage survey on a regular basis, with the results showing that the Company's staff remuneration structure maintains standard when compared to that of other companies in the same business group.

In addition, the Executive Board considers adjusting wages on a yearly basis by taking into account the Company's operational results through the Competency KPIs and its payment coverage ratio. Furthermore, the Company establishes a provident fund for long-term care of staff in order to motivate staff to work with the Company and to encourage staff's saving habits to secure adequate retirement savings for a quality retirement life. The staff, who have applied for the provident fund membership, pay their savings at a rate of 5 to 15 percent of their salary, depending on their ability to save, and the Company pays contributions at a rate of 5 to 10 percent, depending on such staff's service years and the fund's requirements. Staff who are members of the fund shall gain benefits from management in proportion to each staff's savings in the fund. The Company also provides group life insurance benefits for staff so as to secure staff and staff's family.

- **Staff Welfare**

In addition to welfare required by law, the Company also provides staff with an additional appropriate welfare, namely, medical treatment allowance life insurance, provident fund, uniform, right to ordination leave, right to marriage leave, right to funeral leave, right to maternity leave, and other allowances, as well as supporting the roles of the Staff Welfare Committee, beginning with the arrangement for the legitimate election as required by law in order to jointly provide advice and suggestions to the Company on welfare benefits for its staff as a whole and monitor to ensure that the Company's welfare benefits are properly provided to its staff, resulting in adjustment and improvement of the Company's welfare in various aspects as appropriate according to the changing economic and social circumstances. Even in the situation of the COVID-19 pandemic, the Company continues to provide its staff for the welfare as it does in normal times, with an emphasis on ensuring that staff are protected from COVID-19 infection, by providing staff with anti-infective equipment such as medical face masks, gel alcohol, and ATK kits, among other things. Furthermore, the Company has a policy in place which allows pregnant staff or staff with high-exposure to COVID-19 to work from home during the time when the COVID-19 situation has not yet been ameliorated.

- **Quality of Staff's Life**

The Company fosters a safe working environment, with a focus on inculcating and raising a sense of awareness of safety and occupational health among the Company's staff, and also incorporates social and environmental responsibility activities into the working process, owing to the fact that the Company is concerned not only with the safety of its service users, but also with the safety of everyone involved in the Company's value chain, as evidenced by the introduction of a policy on safety and hygiene, which is available on the Company's website at www.bemplc.co.th. In addition, the Company ensures that a working environment is safe for staff's lives, health, and belongings, as well as for the Company's property. In this regard, the Company has prepared manuals in a variety of fields to serve as guidelines for appropriate management for each target group on safety management the establishment of a Safety, Occupational Health, and Work Environment Committee, and the appointment of safety officers at the executive and supervisory levels.

- **Labor Relations**

The Company sets out a policy to take care of its staff via the line management through the human resources unit with the duties to provide advice to, support supervisors and provide them with regular training on personnel management and understanding of the work rules and regulations of the Company. The Company also sets out the investigation procedures with clarity in case of any disciplinary misconduct by staff to ensure fairness and solutions to prevent repeated misconduct, including clear and rapid grievance procedures. Furthermore, the Company yearly organizes the activities to strengthen relationships with benefit its staff, comprising merit-making and food offering to monks activities on the occasion of New Year Day and merit-making to celebrate the Company's anniversary, New Year's Eve activity, Blood Donation to Thai Red Cross Society activity, Songkran Day activity, workout activity, mindfulness meditation activity, health and nutrition activity. In addition to the Company's internal activities as mentioned above, the Company also encourages and supports budget for off-work activities by allowing staff who are interested in useful activities to form activity group in the form of various clubs, such as, sports club, photo club, and music club. The sports club arranges for activities all year round, i.e., football match, walking-jogging for good health, as well as participation in walking-running for charity in association with the government sector on various occasions; internal sports activity so as to encourage staff to work out and then select the Company's athletes to participate in sports competition with external organizations to gain more experience and strengthen good intercompany relationships. The music club regularly arranges for recreational activities every year to promote staff to show their artistic and performance talents, to perform their shows in various events of the Company, and to spread happiness to the society, particularly to the underprivileged communities.

During the COVID-19 pandemic of the Company issued orders forbidding its personnel from organizing activities with external parties with large gatherings, for example, CSR activities, public relations activities, as well as from traveling to crowded areas, such as, sports clubs, in response to government announcements prohibiting gatherings or doing activities which pose a risk to the spread of the disease. In 2021, the Company therefore suspended various activities until the situation would be rectified, with the exception of blood donation activity, which was carried out strictly in accordance with measures formulated by the National Blood Centre, both in terms of location preparation and staff preparation.

- **Personnel Development**

By the Company's business nature, which is provision of both expressway and metro system services, the Company can then develop its unique body of knowledge, with an aim of becoming a learning-centered organization to develop the knowledge exclusive to the Company's businesses for its staff through both off-the-job training and on-the-job training. Furthermore, the Company has initiated the passing on such specialized knowledge to school and university students in various educational institutions to ensure that they have knowledge in the management of the expressway system and the metro system, as a means to create human resources which may become a major force for the Company in the future.

The Company prepares, due to its significance put on personnel development, an annual plan on training and development for staff at all levels, in accordance with the "Academy Framework", consisting of work-related courses, which will provide staff with refresher training every year, with a test to evaluate both theoretical and practical learning outcomes, to ensure that staff can properly perform their duties on a safety basis; and soft skill training aimed to ensure that staff have information and understanding that can be efficiently applied to their works.

The Company has a firm belief that its staff is a valuable resource, one of the most essential factors which is instrumental in the organization's efficient advancement towards its goals of aspiring to long-term success; and in that belief, as a result, the Company's personnel development policy is therefore concentrated in four areas.



- 1. Work Skill :** The Company is dedicated to encouraging its personnel to perform their duties with high standards, with precedence given to Functional Competency corresponding to their duties and responsibilities. The personnel must be developed to ensure that they are competent in their job positions and meet the standards expected by the organization.

The regular Functional Competency Evaluation of incumbents and supervisors is thus crucial in order to recognize their actual Functional Competence and Functional Development Gaps, in order that the Company can develop its personnel based on their actual abilities in order to maximize efficiency, and uses the 70 : 20 : 10 Learning Model with an emphasis on learning from hands-on practice at (70); suggestions/recommendations from supervisors or seniors at (20); and the formal training at (10), respectively, due to the fact that the best learning comes from actual practice.



- 2. People Skill :** Personnel development is not only taken precedence to ensure their competency in performance, but the Company also has regard for development of their managerial competency, collaboration, team management, and leadership development. The Managerial Competency Evaluation for staff with their subordinates, including the Managerial Readiness Test for managers, allows the Company to promote and develop its staff in accordance with their actual abilities, thereby resulting in maximum efficiency.

Management Development and Leadership Development are matters that the Company takes into account and encourage for its staff, particularly those in roles with subordinates, such as Management Development Programs and Leadership Development Programs, and so forth.



- 3. Keeping Pace with the World :** Nowadays, the world is faced with events that are full of volatility, uncertainty, complexity, and elusive ambiguity (VUCA World), especially with technological development such as AI (Artificial Intelligence) or Artificial Intelligence Cryptocurrency or a type of digital asset, and Agile (a working model for the modern enterprise), and other unexpected and severe changes, also known as Disruption. As a result, it is critical to prepare staff to deal with any changes, particularly with technological development such as AI (Artificial Intelligence) or Artificial Intelligence Cryptocurrency or a type of digital asset, and Agile (a working model for the modern enterprise), among other things.

Knowledge will assist the Company's personnel in coping with and dealing with any changes that may occur in their job and daily lives. The Company has since pushed diverse modern technology information to its personnel through the Half Day Talk / Half Day Talk On Tour project, which involves inviting qualified specialists in various fields to offer modern technology knowledge to the Company's personnel on a monthly basis (On site). Moreover, the Company has broadened its worldview by sending staff on study trips (including other field trips) to see how leading and reputable organizations in that field have applied various technologies in real-world situations, with the Half Day Talk / Half Day Talk On Tour project's objective being to raise awareness of and ensure adaptation to today's evolving world, as well as preparation for the future, while also enabling staff to adopt technologies in their work and contributing to the organization's readiness to keep pace with technologies.



4. Organization Demand Fulfilment : The key points of personnel development are not only for personnel to have competency in work (work skill), have management/leadership skills (people skill), and have readiness to cope with changes in various fields (keeping pace with the world), but personnel development must also be for the organization's achievement of the visions, missions through personnel development in order to ensure the organization demand fulfilment. To that end, the Company values personnel development and advancement in order for them to have the knowledge, competency, and capacity to lead the Company towards its ultimate goals in a sustainable manner. Another criterion that the Company utilizes as a guideline to develop its personnel so that they have critical behaviors as required by the organization is Core Competencies, with these core competencies contributing to the organization's achievement of its most vital goals, as well as the Business Acumen, through the Show Share Shine project, with the aim of spreading the organization's significant knowledge, such as departmental tasks and missions, to the Company's personnel, and ultimately, in the hope that this knowledge will be helpful and can be used to expand their work operations.

- **Responsible Production of Goods and Services for Customers**

The Company, as an expressway and metro service operator, is committed to fulfilling the people's requirements for their travelling via the transportation networks which have been connected and stretched to the central business districts of Bangkok and its vicinity, with our convenient and fast services, especially in terms of safety, which all staff must give the number one priority to and strictly adhere to the Company's safety regulations, including public relations on safety via media and activities in varied forms in order to ensure public knowledge. Furthermore, the Company has carried out a study on new routes in response to further urbanization.

In respect of the expressway business, the Company has carried out studies and development of international standard engineering safety, including addition of the number of automatic toll payment lanes (Easy Pass) and relocation of the passage lanes to reduce traffic flow at the toll gates which will help alleviate the traffic congestion in front of the toll plazas, and addition of EMV Contactless debit and credit card payment system, together with addition of traffic communication channels through Smart Traffic Signs and Variable Message Signs in order to keep motorists informed of the traffic conditions on expressways, as well as ensuring the regular improvement of the expressway guide signs on at-grade roads, both main roads and alley roads, to provide convenience and greater confidence in access to the expressways.

With regard to the rail business, the Company puts emphasis on quality services on the motto "Service above all else" while simultaneously having a policy in place which allows the MRT service to become lifestyle of Bangkok residents under the Company's professional operations. For such purpose, the Company has set its operational goals for service quality, comprising Safety which is the Company's top priority; Convenience with a focus on taking care of all equipment and facilities to ensure they are properly functional on target; Fast with keeping the average train speed aligned with the timetable in response to passengers' needs during both peak and off-peak hours; Reliability with maintaining the trains and signaling systems in good conditions; and Punctuality with keeping the timetable and stops time at every station punctual with the least possible deviations.

As for the commercial development business, it is considered as the Company's non-core business to which the Company also gives importance other than its core businesses, thereby diversifying the Company's services which can fully satisfy the needs of the service users. To that end, the Company has developed a total space for retail shops and sale promotions of approximately 19,490 square meters. The Company has, in collaboration with the Mall Group, developed a space at the basement level of Park & Ride Facility at Lat Phrao station into the premium supermarket 'Gourmet Market' is opened for service to fulfill the urban lifestyle, so as to create opportunities for those who wish to start a business while also enlarging the area to accommodate the growing volume of the MRT service use in the future. Furthermore, the Company has carried out commercial development relating to the expressway system by allowing private companies and individuals to operate commercially in the expressway area for installation of traffic warning signs and various types of advertising banners, as well as the use of the area to build retail shops in the area of toll plazas, and so on.

- **Customer Relations Management**

- **The Expressway Business**

Target customers of the expressway users refer to those motorists who desire a convenient and rapid transportation or who desire to shorten the travelling distance to their destinations as well as to avoid the traffic congestion along the congested normal roads in Bangkok and its vicinity.

- **The Rail Business**

The Company's target customers in the MRT system can be divided into two groups, namely, residents nearby the metro routes and those who need to pass or head for other destinations along the metro routes.

The customers of the two businesses can be categorized by purpose of their journeys as follows:

1. Commute for work;
2. Commute to schools/educational institutes;
3. Commute for tourism/ leisure;
4. Commute for special activities, e.g., seminars or conferences; and
5. Commute for other purposes, e.g., business dealings.

- **The Commercial Development Business**

The customer characteristics and target customer groups of the commercial development business in the expressway business and the rail business vary according to the service types.

4) COMMUNITY AND SOCIAL DEVELOPMENT ENGAGEMENT

“We are committed to take care about near and remote societies by making them filled with happy smiles forever”

Society and Communities

The Company recognizes its role as a crucial contributor to the development of the transportation network which is committed to operating the integrated transportation system connection to facilitate travel and help alleviate traffic problems in Bangkok and its vicinity in order to upgrade the quality of life of the service users, by giving precedence to delivery of the safe, fast, and efficient services, which will be accomplished through the use of a modern transportation network, due to the fact that the convenient and efficient transportation systems are currently essential for an urban lifestyle, whether it be road or electric train systems, all of which play a key role in integrating livelihoods of the people in the society from one side of the city to the other side. Moreover, the Company has, with its commitment to achieving the “Route of Happiness for Better Travelling Mode”, strived to bring people happy smiles and safe

travel together with their families at every moment in the Company's belief that strengthening good experiences and relationships in their families serves as another approach to foster love, warmth, and camaraderie, while also improving the quality of life for people, always subject to the Company's business operations with social and environmental responsibility, as the best practices adhered to by the Company for sustainable business operations.

In addition to the social responsibility policy aimed to be the path of safety and happiness, the Company also attaches great importance to the education of youth, with a focus on promoting their out-of-classroom learning experiences through various learning activities and also granting scholarships to underprivileged children and youths to fund sustainable occupations.

3.4.2 SOCIAL PERFORMANCE

1) STAFF AND LABOR

The Company is committed to treating all staff and labor with regard for human rights through employment and fair remuneration, staff training and development, development of staff engagement and satisfaction, management of safety, occupational health and working environment, in order to enhance staff competency and build their engagement with the organization.

- **Employment**

The Company, as an expressway and metro service provider, has employed personnel in main lines intended to focus on quality and safety, provided that they must be in good health and skilled in efficiently using tools and equipment of various types to take care of customers and be instrumental in driving the organization towards its goals.

Overview of Personnel Management in 2021



- **Promotion and Support of Social Employment Opportunities for Person with Disabilities**

Over the past years, the Company has complied with the Empowerment of Persons with Disabilities Act by remitting contributions to the Fund for Empowerment of Persons with Disabilities under Section 34 of the Act; and on October 26, 2021, the Company, in association with the Department of Employment, signed a Memorandum of Understanding on Cooperation in the Promotion and Support of Social Employment of Persons with Disabilities, to ensure that people with disabilities or their caregivers are employed and to support employers or owners of establishments in the right to subcontract persons with

disabilities or their caregivers under Section 35 of the Empowerment of Persons with Disabilities Act B.E. 2550 (2007). The signing of the Memorandum of Understanding on Cooperation is in collaboration with the government sector to promote the social employment opportunities for persons with disabilities and be a contributing part in society's care, as the Company recognizes the value of individuals' having jobs, particularly those with disabilities who have both potential and desire to work, in order to improve the quality of life and provide job opportunities for them to become self-reliant.



• **Staff Training**

In 2021, the Company provided training courses for its staff to enhance their employability skills and competencies, with an average of 37.31 hours of staff knowledge development training and activities per person per year, compared to a target of 30 hours per person per year, and its costs amounting to Baht Two Million. The major courses are as follows:

○ **Training Courses for Specialized Knowledge**

All of the Company’s staff must attend basic training courses related to the Company’s rules, regulations and policies, and thereafter, staff in the Operations and Engineering Group must attend the Functional Training Course, which covers subjects directly related to the work operations, as follows:

○ **Rescue Operation and Traffic Management**

Staff in charge of expressway rescue work must receive rescue operation and assistance drills in the event of expressway accidents, annual safety training, training on how to use expressway rescue vehicles, safe driving training, traffic volunteer training, and on-the-job training. In addition, the Company has arranged for a three-month new staff orientation, as well as service mind training, prior to actual operation on the expressways.

○ **Toll Collection Operation**

The Company’s personnel in charge of toll collection operation refer to personnel with the duty to collect tolls of the Si Rat - Outer Ring Road Expressway, whereby the Company provides the personnel training in toll collection to ensure that tolls are correctly and completely collected to facilitate the expressway users’ toll payment with convenience and rapidity; and the Company’s personnel in charge of toll revenue operation on the Si Rat Expressway and the Udon Rattaya Expressway, with the duty to ensure that tolls are correctly, transparently and precisely collected, in collaboration with

the government sector, namely, EXAT, responsible for toll collection from the expressway users. The Company also provides the internal on the job training regarding the roles and responsibilities of toll collection controllers, emphasizing that tolls must be collected punctually, and verification of data on vehicle counting and collection records must be made correctly and accurately.

In addition, the condition of toll collection equipment must be checked to get it ready for full-time service and to ensure the accuracy of toll collection, which will help assure the Company’s complete revenue streams and equally protect the interests of shareholders and stakeholders. Furthermore, personnel working in this filed have the opportunity to go on overseas study visit on toll collection systems.

○ **Structure Maintenance Operation**

This is to ensure that the expressways are always ready and safe for service, the Company thus regularly provides structure operation training for its personnel in charge of engineering work to ensure that they are specialized in the inspection and maintenance of the Segmental Box Girder structures in accordance with international standards.

○ **Production and Development of Rail Personnel**

The Company, in association with 7 network partners with a total of 72 agencies which play a key role in the development of the rail system, has conducted research and development of rail technology and innovation to accommodate the rail industry through the signing of the Memorandum of Understanding on Academic Cooperation for “Rail Personnel Production and Development, Rail Technology Research and Development to Accommodate the Rail Industry”, to support, promote and share resources in the interests of rail development in various fields, with the network partners consisting of Department of Rail Transport, Office of the Higher Education, Science, Research and Innovation Policy Council, Rail Technology Research and Development Agency (Public Organization), professional bodies and research and certification bodies on rail systems, public and private higher education institutions which offer rail system courses, public and private occupational education institutions which offer rail system courses, and public and private rail service operators.



○ **MRT Control Officer and MRT Operation Control Officer Training**

The MRT control officer training takes at least 600 hours of training and the MRT operation control officer training takes at least 1,100 hours of training, which are provided in theory and in practice by the way of actual train driving and train-driving simulator, training to use equipment in train operation control room, emergency response drills and exercises, including on the job training, where safety is given the top priority, whereby professional trainers are provided to closely monitor staff's training. Moreover, the Company's staff are given refresher training on a yearly basis, for example, training on operational regulations, how to use equipment, train driving practice, railway system maintenance, and so on, including safety-related subjects such as firefighting and first aid, incident management, as well as courses for service work, in order to ensure that the trained personnel can provide passengers with quality services while ensuring their safety.

In addition to specialized knowledge through the training and knowledge provided by the Company, the Company has also arranged for the systematic storage of the Company's knowledge so that it can be thoroughly passed on to all staff, including the provision of training in other fields which promotes and supports performance to be more efficiently.

○ **MRT, in association with the MRT Red Line, Rehearsed for Incident Management to Prepare for the Opening of the Walkway Connecting Bang Sue Grand Station**

The Ministry of Transport had prepared to open for public use the MRT Red Line, Bang Sue - Rangsit Section and Bang Sue-Taling Chan Section, at Bang Sue Grand Station on August 2, 2021. The Company, in association with MRTA and the State Railway of Thailand (SRT), participated in the rehearsal for virtual incident management at the walkway connecting the MRT Bang Sue Station with the Bang Sue Grand Station, with simulations of emergencies, for instance, in the case assistance to passengers who get into an accident, in the case of a fire, flood, among other things, in order to prepare the staff of the three work units to become proficient in communicating and remedying the occurred situations rapidly, safely, and efficiently, to accommodate the launch of the MRT Red Line's service trial. All of the three work units are dedicated to ensuring easy access to convenient and safe services by passengers, affirming the commitment to "Convenient, Rapid and Safe Travel with MRT".



Rehearsed for Incident Management to Prepare for the Opening of the Walkway Connecting Bang Sue Grand Station

○ **Codes of Conduct and Business Ethics Training**

This training course was intended to serve as guidance for all staff regarding their work responsibilities and duties and to ensure that they understand and also follow the preliminary guidance described in the Company's Codes of Conduct and Business Ethics handbook, which is in line with the Company's vision, mission, and corporate culture, in order to achieve goals for improved quality of work and life for staff. The Company also provides for refresher training to update staff's knowledge by the way of E-Learning & E-Exam, which all new staff are required to attend, including regular exams for the existing staff on a yearly basis.

o **Annual Personnel Training & Competency Development**

The Company put into practice the idea of developing staff competency by improving the Training Roadmap for all levels of staff, namely, executives, supervisors, and operating staff. The roadmap is intended to make sure that staff gain basic knowledge and skills required for their work performance, both technical and soft skills. These two types of skills are fostered in mandatory programs for new staff, e.g., an orientation program for new staff about the Company and about the “Route of Happiness for Better Travelling Mode” including rules, regulations, and requirements; a work safety program; and a quality management system program.

The Company’s permanent staff are given refresher training on knowledge every year. All of these training programs enable staff to apply such knowledge to their work performance and adapt themselves to the corporate culture, so as to have a sense of pride and to conduct themselves properly and in line with the goals.

Moreover, the Company attaches importance to learning and development of personnel and ensuring organizational sustainability. The Company has also initiated a Knowledge Management (KM) project to collect, store and apply knowledge for the benefit of the organization, including Tacit Knowledge and Explicit Knowledge, and created the KM Website to store knowledge of the organization and provide opportunities for all staff to have access to and make use of the knowledge for further work operations, as well as the knowledge sharing to transform an organization into a learning organization. The number of knowledge topics from 2017-2021 is as follows:



Furthermore, the Company has, due to the pandemic of COVID-19, encouraged its staff to adapt and learn through modern tools, namely, Virtual Training via online meeting tools, and training through the E-Learning system of various training institutes such as Thaimooc of the Ministry of Higher Education, Science, Research and Innovation, or the E-learning system of the OCSC, etc.

• **Safety and Occupational Health and Working Environment**

The Company continues to develop and improve the efficiency in safety operations to minimize the risk of illness, injury or fatality, and appropriately take care of the quality of life of its staff or employees. The following are the major operations:

o **Fire Evacuation Drills for 2021**

The Company held fire and fire evacuation drills for 2021 on November 11, 2021 at CCB Building 2, Building B, with a total of 30 employees participating in the drill, with a 100% assessment and the overview of the fire and fire evacuation drills was at an excellent level (96.53 %), and on November 12, 2021 at the Depot, CCB 7 Building, with a total of 11 employees participating in the drill, with 81.82 % of the participants in assessment, the overview of the fire fighting and fire evacuation drills was at an excellent level (96.60 %).

○ Accident at Work

The Company has the prevention and safety control measures by holding an accident investigation meeting to analyze the causes and establish the work-related accident prevention measures, with the department under which the staff who had an accident is under attending the meeting. According to the work-related accident investigation in the past year, the Company had the statistics of 7 work-related accidents on the expressways, without causing any loss of staff, and 2 work-related accidents in metro service.

○ Safety Training

To ensure compliance with the measures for prevention of the spread of COVID-19, the Company provides online safety training for employees and training course on “Safety, Occupational Health, and Working Environment for Existing Employees and New Employees.”

○ Anti-Drug in Office Campaign

With the Company’s awareness of the country’s drug problems which give rise to major impacts on the economic and social stability, public order and morality, the Company, in association with the Company’s Welfare Committee, has participated in the White Factory project (Drug Free Workplace project), organized by the Department of Labor Protection and Welfare, by participating in activities with external agencies, and has provided cooperation in drug testing for all the Company’s staff. In the implementation of the project, the Company has set out a policy to demonstrate the Company’s commitment and serve as a guideline for its implementation, as follows:

1. Prioritizing the drug problem prevention and solution by educating staff about drug poisoning and organizing staff health check-up every year or on a specific occasion.

2. Encouraging all staff to play a role and take part in drug problem prevention and solution campaigns, as well as to jointly monitor the Company’s inside and outside areas in order to prevent the spread of drugs in the Company.
3. Cooperating with government agencies for various measures in drug problem prevention and solution campaign.
4. Appointing the Welfare Committee to take responsibility for implementing the White Factory project (Drug Free Workplace project) in order to meet its objectives and adhere to the policy for preventing and resolving drug problems in the workplace.

In this regard, the Company assigned the Company’s Welfare Committee to serve as the White Factory Project Committee ex officio to ensure that the Drug Free Workplace project can be continued. The following are the roles and responsibilities of the White Factory Project Working Group:

1. Providing suggestions about guidelines for drug prevention and solution;
2. Complying with policies and action plans for drug prevention and solution;
3. Promoting and supporting anti-drug awareness activities and campaigns within the Company;
4. Ensuring staff’s knowledge and understanding about drugs, as well as correct preventive methods;
5. Monitoring and evaluating the performance and report to the Company.

The Company was granted a Drug Free Workplace Certificate by the Department of Labor Protection and Welfare as the Company with “Drug Management System in the Business Premises Ranking No. 1”, from the total of 258 nominees as a role model for other business premises in a way which the Company could encourage its staff to participate in anti-drug campaigns in the business premises until concrete success could be achieved.

• **Staff Engagement**

Human resources are a driving force behind the organization’s growth and success; therefore, retaining staff for the long term and ensuring their loyalty to the organization are critical issues which the Company is aware. To that end, the Company conducts a survey on staff needs/expectations from the organization once a year, with its aim of allowing the Company to recognize staff’s needs and expectations towards the organization while also recognizing in what areas the Company should promote its staff in order to contribute to their participation, satisfaction, pride in work, including long-term engagement with the organization, with such survey meeting the requirements of the ISO 9001 & ISO 14001 and asking questions divided into 4 parts, as follows:

1. Responsibility
2. Colleagues
3. Supervisors
4. Organization

The Company’s human resource management goal is to retain quality staff with the organization. As a result, if they wish to resign, the Company will conduct an opinion interview with the resigning staff by asking them to fill out the questionnaire with interviews on various topics, namely, reason of resignation, responsible job descriptions, learning and career advancement opportunity, attitudes towards supervisors, colleagues, and corporate culture, along with creative advice for the organization’s development and improvement in order that the information obtained is used for analysis, consultation, and forwarded to each department, as well as sharing information with top management who is empowered to make improvements, establish guidelines for retaining the existing staff with the Company.

In 2021, the staff engagement with the Company was gauged based on the proportion of voluntarily resigning staff, namely, in the expressway business representing 5.65%; and in the rail business representing 6.11%, compared to the target of 5%.

Remarkable Employee Relations Activities in 2021

In the previous year, the Company strengthened relationships with its staff and promoted their ethics through the following activities:

○ **Blood Donating**

To help alleviate the situation of blood shortage of all groups resulting from the COVID-19 crisis, the Company, in association with the Faculty of Medicine Vajira Hospital, Navamindradhiraj University, then held a blood donation activity at the Si Rat - Outer Ring Road Expressway Control Center, three times a year, with active cooperation of a lot of executives, staff and residents nearby.



○ **Listening to Dhamma with BEM**

Due to the situation of the pandemic of COVID-19, the Company aimed to create an atmosphere which would encourage staff during the crisis by adopting the principles of Buddhism into practice for confronting concerns with intelligence and wisdom, with Phra Methewachirodom, Director of the International Meditation Center, Rai Chuen Tawan, and Director of Vimuttayalaya Institute (V.Vajiramedhi), being invited to give a lecture on the topic 'In Times of Crisis, Dharma Nourishing Heart'.



o **Thot Kathin Ceremony 2021**

The Company organized the Thot Kathin ceremony 2021 to make a merit at Sanam Nok Temple, Amphoe Bang Kruai, Nonthaburi Province, adjacent to Sirindhorn Station (MRT Blue Line) and Bang Bamru Toll Plaza, in collaboration with service users of the MRT Blue Line and the MRT Purple Line, CK Group's affiliated companies and business partners, by gathering the merit-making money to fund dwelling restoration for monks and novices, and to uphold the Buddhism, as well as granting scholarships to Wat Sanam Nok School. This activity was carried out strictly in accordance with the measures to prevent the spread of COVID-19.



2) CUSTOMERS

The Company continues to develop its products and services to satisfy the needs of expressway users and MRT passengers its commitment to responsibility, integrity and ethics. In 2021, the Company has received **“very good”** customer satisfaction and received complaints from customers on critical issues, divided into the following:

14 issues for the expressway business: There were critical complaints about the disrupted EMV Contactless payment system at Rama 9 Toll Plaza, the Si Rat Expressway, thereby precluding the expressway users from paying tolls; yet their credit cards were debited. To handle the complaints, the Company remedied the system and also refunded the money to service users' cards.

43 issues for the rail business: There were critical complaints about the crowded trains during rush hours, for which the Company properly adjusted its service timetables and provided for backup trains to accommodate passengers' travel during the morning and evening peak hours, as well as maintaining cleanliness and safety in accordance with the measures for prevention of the spread of COVID-19.

• **MRT Passenger Safety Promotion Strategies**

The Company organizes the MRT passenger safety promotion activities, one of the measures to minimize the statistics of escalator accidents among the elderly. In 2021, the Company performed a Safety Share Take Care On Tour activity 2021, with a focus on ensuring the elderly and vulnerable groups' understanding as to the correct and safe use of the MRT system. For this reason, the Company arranged for a team of volunteers to look after them by making field visits to 4 stations, namely, Wat Mangkon Station, Lat Phrao Station, Phahon Yothin Station, and Chatuchak Park Station, in order for the escalator accidents among the elderly to be likely to reduce as much as possible, and passengers were invited to be a part of giving concern and promoting Thai society to help care for the elderly, including the preparation of public relations materials to remind passengers to ensure safety while travelling.



Safety Share Take Care On Tour 2021



Sticker Balustrade at The MRT Blue Line Extension and The MRT Purple Line



Public Relations for Sexual Harassment Prevention & Safety on Escalators and in MRT Trains

3) COMMUNITIES AND SOCIETY

In 2021, the Company always provided the public interest assistance to alleviate hardships caused by various disasters through its CSR activities.

- **Significant Implementation in 2021 in Community, Social and Environmental Dimensions**

The Company conducts its businesses with a sense of community and social responsibility, with an emphasis on minimizing environmental impacts and avoiding operations which may have a negative impact on the quality of life of communities surrounding the expressways and MRT routes, including those who do not reside around the routes but whose destinations are on the routes. To that aim, the Company has organized activities for public interest assistance, activities for alleviation of hardships caused by calamities, and public relations with communities which may be impacted by the Company's operations on a regular and ongoing basis. These activities include the management of complaints made to the Company, which in 2021, were divided into the following:

21 issues for the expressway business: The critical issues were arising from the power outage under the Si Rat Expressway, for which the electrical engineering department rushed to complete repairs, and the impact on the expressway around Rama 6 and the Mahanakorn Intersection from a massive amount of water flowing down during raining, causing trouble for the residents nearby, for which the cleanliness and environment department then resolved by installing rain drainage pipes.

13 issues for the rail business: The critical issues were arising from the sufferings of people residing around Tha Phra Station caused by the noise from the movement of the MRT trains, for which, the project's sound barriers were already installed, and the water flowing down from the MRT train structure into the complainants' houses in the area of structure joint during heavy rain, for which, after the problem inspection, it was found that there was a water leak at the structure joint, for which the Company already installed gutter drains.

In addition, the Company also played a part in improving the quality of life and promoting engagement with communities through various activities as follows:

Activities for Promotion of Youth Learning and Education

- **MRT Children's Day 2021**

The Company values children and youth as the nation's main forces, the Company then organized MRT Children's Day 2021 on the National Children's Day activity, which was during the situation of COVID-19 pandemic. The Company therefore brought over 2,000 pieces of gifts to deliver to the children in a total 23 areas of communities surrounding the MRT Blue Line and the MRT Purple Line, in order to bring joy and happiness to them.



- **BEM Weaving Dream, Sharing with Children Activity**

The Company organized this activity which make dream come true with learning center for kids activity to improve and develop the area of the Pre-School Children Development Center, as well as contributing teaching and learning materials, electrical appliance, baby developmental toys, together with scholarships, with the children being invited to enjoy recreational activities and free-lunch at the Khlong Samsen Community Center for Pre-School Children Development, Ratchathewi District, Bangkok, adjacent to the MRT project, Phra Ram 9 Station, and the expressway (Asoke 2 Toll Plaza).

o **MRT Bring Nong to Conquer TCAS Year 13**

The Company, in collaboration with MRTA and Bangkok Metro Networks Company Limited (BMN), organized the “MRT Bring Nong to Conquer TCAS” activity for the 13th year in a row, and this year, for the sake of everyone’s safety in the midst of the COVID-19 pandemic, it was then held online via Zoom and Facebook Live throughout the country under the concept “TCAS Winner Online” in order to update the latest exam trends with the exclusive tutors for free to promote and develop Thai youth’s education, by giving handy tips and techniques on TCAS exam preparation to high school students across the country. The highlight of this project was a summary of intense content and exam-taking techniques which seemed easy-to-understand, fast, amusing and interesting, not to mention the handful tips for taking exams in various subjects so that all students were ready for the exam. None of this activity would have been possible without the qualified and eminent teachers doing us the honor of sharing their tips and knowledge, namely, Teacher Somsri Thammasarn Sophon to introduce English examination tips. Teacher Wiset Keesukphan (Teacher P’Ae) to increase knowledge skills in PAT1 and Mathematics and Teacher Surachet Pichitphongphao (Teacher P’Yu) to introduce GAT to help students confidently preparing themselves for the university of their dreams. This activity received great attention and acceptance from more than 27,000 students all over the country interested in participating in the activity via ZOOM and Facebook Live, covering all of the 3 subjects. Simultaneously, there were entertaining activities to offer over 45 TCAS conquer courses, as well as a variety of prizes from MRT souvenirs, to the participating students. Following the activities, MRT distributed MRT Bring Nong Pichit TCAS books for all three subjects to more than 70 schools in all nationwide regions in order for out-of-town students to have additional access to information on how to study for the TCAS exam. Aside from that, students who missed the actual day’s activities could check out www.mrttcas.com to watch past teaching videos and get test preparation manuals for all three subjects to review before doing the exam.



Public Benefit Activities



o **BEM Caring & Fighting the Flood**

The Company distributed 500 sets of survival bags, including rice, dry food and medical masks, to flood victims in different areas in order to alleviate their suffering from the flood situation, demonstrating the Company’s commitment to being a part in public assistance by providing flood victims in every area with care and being always ready to assist them in any manner possible.

o **BEM Sharing Kindness to the Society**

To share our kindness to the society, the Company continued to run the “HEALTHY JOURNEY WITH BEM” project, in association with the MRT passengers, by making a pecuniary donation in aid of The Christian Foundation for the Blind in Thailand under the Royal Patronage (CFBT) so that the donation was used to improve the quality of education life of blind children with multiple disabilities at Baan Dek Ramintra School, while also giving Baan Dek Ramintra students and teachers a great encouragement.





○ **BEM Sharing Kindness to Pets**

To share our kindness to the society, the Company continued to run the “HEALTHY JOURNEY WITH BEM” project, in association with the MRT passengers, by making a pecuniary donation in aid of Home for Handicapped Animals Foundation (under the Patronage of Luang Ta Maha Bua Yannasampanno), Pak Kret District, Nonthaburi Province, to help look after over 1,000 sick and disabled animals in the Foundation’s care for the betterment of animals.

○ **BEM Donating Computers to the Mirror Foundation “Computer for Children Project”**

BEM donated 128 sets of computers to the Mirror Foundation under the Computer for Children Project in order for the Foundation to further distribute to out-of-time schools in need as teaching aids at the Mirror Foundation.



• **Operations and Business Activities During the Pandemic of COVID-19**

The COVID-19 pandemic is not harmful only to the Company’s businesses but also to its stakeholders, including staff and their families, customers, business partners, shareholders, as well as the communities and society. The Company has guidelines in place to lessen the impact or use this opportunity to bring benefits for the concerned stakeholders in order to build their trust in the long run and to maintain a good relationship with various groups of stakeholders while also affirming the Company’s role as a good citizen.

1. **Staff and their Families**

- The “Getting Vaccinated with BEM Help Nation Safe” activity was undertaken to ensure that train system staff and expressway toll collectors received vaccinations against COVID-19, in order to enhance confidence and safety in using public transportation services at Chula COVID-19 Vaccine Program Center, Chamchuri Square Building. More importantly, BEM arranged for all staff to have been fully vaccinated with 2 shots in accordance with the policy of the Ministry of Transport at the Central Vaccination Center at Bang Sue Grand Station, and planned to provide for them to receive the 3rd and 4th booster vaccinations by 2022.



- The Company established its stringent safety measures, by providing its staff with training on measures to properly prevent and monitor the transmission of COVID-19, and body temperature check points, as well as providing them with anti-infective equipment such as alcohol or hand sanitizer, medical face masks, gloves, and others.
- Cleaning and disinfecting work areas as well as refraining from using areas which have risk exposure to the disease transmission.
- Assessing the severity of the situation in order to plan the service operations, such as the number of staff working at the toll plaza buildings, the number of trains in service, and the number of active staff involved in operation and maintenance services, as well as preparing a backup plan for supporting the Company's operations.
- Financial assistance such as taking out a COVID-19 insurance policy for staff, with the Company having no policy for termination of employment or reduction of salary / welfare of staff due to the situation of the COVID-19 pandemic.
- Providing the group health insurance for COVID-19 infection for staff in addition to medical treatment allowance.
- Staff are allowed to work from home in response to the government's social distancing measures which would help minimize the risk of infection and transmission, with the Company subsidizing the cost of Internet access for staff who work from home, while also changing the way staff work to limit the risk of infection by ensuring split team arrangement to minimize close interactions to ensure interchangeable work, as well as communicating via teleconference or telephone contact instead of physical meeting.
- Staff were given applicable rules to follow in order to prevent the spread of diseases, such as the policy on COVID-19 vaccinations, the policy requiring staff to refrain from unnecessary travelling to crowded areas or participating in events or rally activities, while also keeping an eye on the situation and government measures in order for various operational measures to be adapted appropriately, efficiently, strictly observed.

2. Customers

Regarding the COVID-19 pandemic, which is detrimental to a wide range of people, with the Company sympathizing with and caring for all, the Company was therefore determined to alleviate the burden of people's cost of living by giving an exemption of toll fees on the 3 expressways: "Chalerm Mahanakorn Expressway - Si Rat Expressway - Udon Rattaya Expressway", every public holiday. Furthermore, the Company offered a one-year toll discount at "At Narong Toll Plaza 1" from the M.R.T. Chalong Ratchadham Line (MRT Purple Line) to the First Second Expressway heading Bang Na at the rate of Baht 25 per trip for all types of vehicles, with effect from July 1, 2020 to June 30, 2021. Moreover, the Company supported government policies under measures aimed of mitigating the burden of people's living costs and rehabilitating the economy due to the COVID-19, whereby the Company allowed eligible persons for the "Half-Half Co-Payment Phase 3" scheme and the "Boost Purchasing Power" scheme to use their rights through the "Half-Half Co-Payment Phase 3" scheme and the "Boost Purchasing Power" scheme, to pay for MRT fare tickets on both the MRT Blue Line and the MRT Purple Line, via the Application "Pao Tang", and the "State Welfare Card" or "Low-Income Earner Card" from July 1 - December 31, 2021. Also, the Company supported government policies, in collaboration with the Mass Rapid Transit Authority of Thailand (MRTA), by preparing to accommodate the people's use of rights in the "We Win" scheme by issuing tokens for travel at all stations on the M.R.T. Chalerm Ratchamongkhon (MRT Blue Line) and the M.R.T. Chalong Ratchadham Line (MRT Purple Line) from February 5 - May 31, 2021. The project's eligible people were split into a group of state welfare card holders and a group of eligible persons through the Application "Pao Tang".

3. Shareholders

Under the COVID-19 situation, the Company convened the 2021 Annual Ordinary General Meeting of Shareholders through electronic media (E-AGM) in place of a sit-down meeting in order to minimize the risk of spreading the COVID-19 virus, with the meeting video publicly posted on the Company's website.

4. Traders

- In the case of a counterpart's request for a waiver of delivery of goods or an extension of the operating period as a result of the COVID-19 situation, and if any fines for late delivery of goods or operations have already been imposed, the Company will consider waiving or reducing the fines to the counterpart as appropriate.
- Public relations to provide information about the Company's execution for prevention of the disease spread are made to the public, EXAT and contractors, including campaigning for visitors to wear medical face masks, as well as other preventive measures.

5. Communities or Society

The Company recognizes its contributing role in assisting the suffered people and easing their hardship due to the situation of the COVID-19 pandemic; and has thus developed the “BEM Caring & Fighting COVID-19” project, which included the following activities:



- BEM Distributed COVID-19 Infection Prevention Equipment and Dry Food to Adjacent Communities to the Expressway**

The Company distributed COVID-19 infection prevention equipment and dry food to three nearby communities, namely Wat Uthai community, Wat Soi Thong community, and the communities behind Sri Khema market, because of the new wave of the COVID-19 pandemic, which placed people’s lifestyles in unusual situations due to a loss of income and a shortage of infection prevention equipment.

- BEM Distributed Consumables & Disinfection Equipment to District Offices and Khlong Toei Community**

The Company distributed COVID-19 infection prevention equipment together with necessary items to help those who were suffering from the pandemic of COVID-19 in Khlong Toei community, by dividing supporting items into 2 parts to meet urgent needs: Part 1, distributed to Khlong Toei District Office to support the officials’ mission in proactive screening in the community, such as Personal Protective Equipment (PPE), cloth and medical face masks, disinfectants, rubber gloves, alcohol; and Part 2, brought to help alleviate the suffering of residents in Khlong Toei community through the Duang Prateep Foundation, such as cloth face masks, medical face masks, alcohol, rice, milk, instant noodles, canned food, garbage bags for containing infectious waste, in the total amount of more than Baht 840,000, with Khun Piyathida Niyom, Director of the Khlong Toei District Office, and Teacher Prateep Ungsongtham Hata, Secretary-General of the Duang Prateep Foundation, serving as representatives to receive the donations.





- Distribution of Cardboard Boxes to be Transformed into Field Beds Activity**

The Company donated cardboard boxes to be transformed into field beds for the COVID-19 patients, by collecting more than 400 kilograms of paper boxes donated by BEM employees to be recycled into field beds for donations to field hospitals across the country to accommodate the hospitalization of the COVID-19 patients, including Forest Industry Organization (Central Office), Ratchadamnoen Nok Road, and various other private agencies. This activity is part of the Company's ongoing promotion of environmental conservation and social assistance efforts in encouraging employees to sort out waste and return used waste to the recycling process for reuse as new products or recycled to reduce waste and environmental impact, as well as being prepared to return to society in various forms.



- Delivering encouragement to medical personnel under the “BEM Caring&Fighting COVID-19” project**

BEM committed to being part of encouraging medical personnel and staff who worked at Central Vaccination Center at Bang Sue Grand Station under the “BEM Caring & Fighting COVID-19” project by distributing necessary items as well as food and drinking water for over 2,600 sets to medical personnel, staff, and volunteers working in public service at 13 vaccination centers surrounding the MRT routes, for instance, Central Vaccination Center at Bang Sue Grand Station, Veth Sports Building 1Vaccination Service Center, Thai-Japanese Stadium in Din Daeng, Chamchuri Square Vaccination Service Center, Berkeley Hotel Pratunam Vaccination Service Center, Singha Complex COVID-19 Vaccination Center, in order to thank to the medical personnel, staff and all volunteers dedicated to acting as front-line personnel in coping with the COVID-19 crisis and encourage to overcome these tough situation together.





• **Financial Support for Medical Equipment of Thammasat Chalermprakiet Hospital Activity**

The Company donated Baht 300,000 for purchase of medical equipment in aid of hospitalization of the COVID-19 patients, together with BEM-labeled cloth face masks and gel-based hand sanitizers, to Thammasat Chalermprakiet Hospital, with Professor Dr. Kongkiat Kulkantrakorn, the Assistant Director of the Hospital, acting as a representative to receive the donation.



clean for further usage in a timely manner. This activity is part of the “Healthcare 2021” project for which the Company distributed the “PETEs (Patient Isolation and Transportation Chambers)”, in collaboration with Matchon Group, to help the COVID-19 patients and protect medical personnel efficiently.



• **BEM Cares from the Heart through “PETE”**

The Company distributed PETEs (Patient Isolation and Transportation Chambers), negative pressure isolation stretchers, to four hospitals, namely Ramathibodi Hospital, Chulabhorn Hospital, Kanchanaphisek Medical Center, Faculty of Medicine Siriraj Hospital, and Banphaeo Hospital (Public Organization), to help people and support the work of frontline personnel during the ongoing COVID-19 pandemic crisis, as well as reducing the risk of spreading the infection between patients and medical workers in charge. To put it simply, a “PETE” is an infectious respiratory patient transport equipment, as an innovation locally developed and manufactured by Thai researchers from MTEC-NSTDA, which can substantially help out medical personnel and COVID-19 patients in urgent situations, due to its features which are lightweight, easy to maneuver, and inside equipped with an air filtration and sanitizer system before air will be released out, and it can be imported to a TC scanner without removing the patient from the stretcher, not to mention that it is easy to

- Donation of Green Chirettas Plant for Production of Herbal Medicine to Wat Chak Daeng in Samut Prakan Province Activity**

The Company donated the 120-kg fresh Green Chirettas Plant to Wat Chak Daeng in Samut Prakan Province, with Phra Tipakorn Ariyo serving a representative to receive the donation, in order that they would be processed by Wat Chak Daeng into powdered Green Chiretta medicine in capsules for further donation to the COVID-19 patients with mild disease severity and general villagers, under the “Fah Talai Jorn Herb Planting for Staff and Society” project. This project has used vacant space in the Company’s office building’s surrounding area of approximately 0.5 rai to plant over 5,000 Green Chirettas from seedlings and seeds, which have been protected and maintained without pesticides and chemicals to assure the safety for processing into medicine for the people’s self-care when necessary, and to ensure their adequate supply for distribution to both staff and society.





- **BEM Cares & Fight COVID-19 with Donation of “Sinopharm” Vaccines for Free!**

The Company, in association with MRTA and CH. Karnchang Public Company Limited (CK), supported government measures to prevent the spread of COVID-19 and build public immunity, by providing 4,000 doses of “Sinopharm” vaccine for free to the general public with Thai and foreigners with their domiciles and residences in Thailand, aged 18 years or older, who have never received the first dose of vaccination, at MRT Ratchadaphisek Station.



4 MANAGEMENT DISCUSSION AND ANALYSIS : MD&A

4.1 OPERATIONAL RESULTS AND FINANCIAL POSITION ANALYSIS

OVERVIEW OPERATIONAL RESULTS

The Coronavirus disease 2019 pandemic has started since the year 2020 and widely affected in a series of waves in 2021 which resulted to the negative impact on travelling and led to a decrease in the number of the Expressway users and the Metro passengers. However, the travelling increased significantly when the government relaxed the measures, the recovery rate of traffic and ridership volume when compared from the lowest of the year in August 2021 was at 77.6 percent and 226.4 percent respectively.

In the year 2021, even though the Company's revenue was adversely affected from the COVID-19 pandemic, but with well cost management and well investment strategy, the company received dividend income regularly. For the year 2021, the Company's net profit attributable to equity holders of the Company was in the amount of Baht 1,010 Million, representing a decrease from the previous year by Baht 1,041 Million or 50.8 percent.

Revenue from main business amounted to Baht 10,726 Million representing a decrease from the previous year by Baht 2,764 Million or 20.5 percent from the effect of COVID-19. Toll revenue decreased by Baht 1,695 Million, revenue from Rail business decreased by Baht 1,066 Million and revenue from Commercial Development business decreased by Baht 3 Million. Other income amounted to Baht 755 Million representing a decrease from the previous year by Baht 78 Million or 9.4 percent, mainly from a decrease in interest income due to the loan repayment of receivable under the concession agreement.

Cost of service amounted to Baht 6,989 Million and Administrative expenses amounted to Baht 1,160 Million, representing a decrease from the previous year by Baht 1,437 Million or 17.1 percent and by Baht 187 Million or 13.9 percent respectively, mainly from the efficiency in cost management during the situation.

Finance cost amounted to Baht 1,948 Million representing an increase from the previous year by Baht 128 Million or 7.0 percent due to the company recorded interest cost of the project as cost of construction in the beginning of the year 2020. Moreover, the measurement of loans and debentures at amortized cost method as the adoption of the Thai financial reporting standard (TFRS 9: Financial Instruments) resulted to higher interest expenses in the income statement than the amount of interest payment.



(Unit: Million Baht)

Description	2021	2020	% change	2019	% change
Revenue from expressway business	6,450	8,145	-20.8	10,302	-20.9
Revenue from rail business	3,454	4,520	-23.6	5,022	-10.0
Revenue from commercial development business	822	825	-0.4	783	5.4
Total revenue from main business	10,726	13,490	-20.5	16,107	-16.2
Other Income					
<i>Interest income from the MRT Purple Line Project</i>	218	277	-21.3	380	-27.1
Gain on sale of investment	-	4	-100.0	181	-97.8
Gain on reclassification of investment	-	-	-	3,409	-100.0
Others	537	552	-2.7	327	68.8
Total other income	755	833	-9.4	4,297	-80.6
Total revenues	11,481	14,323	-19.8	20,404	-29.8
Cost of service	6,989	8,426	-17.1	10,311	-18.3
Selling and administrative expenses	1,160	1,347	-13.9	1,336	0.8
Total expenses	8,149	9,773	-16.6	11,647	-16.1
Profit before finance cost and tax expenses	3,332	4,550	-26.8	8,757	-48.0
Finance cost	1,948	1,820	7.0	1,343	35.5
<i>Interest expense from the MRT Purple Line Project</i>	239	293	-18.4	380	-22.9
Profit before income tax expenses	1,145	2,437	-53.0	7,034	-65.4
Income tax expenses	134	382	-64.9	1,755	-78.2
Profit before share of profit from associates and NCI	1,011	2,055	-50.8	5,279	-61.1
Share of profit from investments in associates, net	-	-	-	173	-100.0
NCI	(1)	(4)	75.0	(17)	76.5
Profit attributable to Equity holders of the Company	1,010	2,051	-50.8	5,435	-62.3

SEGMENTAL PERFORMANCE

1. EXPRESSWAY BUSINESS

The revenue from Expressway business was at Baht 6,450 Million representing a decrease from the previous year by Baht 1,695 Million or 20.8 percent, mainly from the effect of continuous infection and mutation of COVID-19 during the year, resulted to a decrease in the number of the Expressway users. The average traffic volume of the year 2021 was at 849,700 trips per day representing a decrease from the previous year by 19.1 percent.

Cost of service for operation of Expressway business consisted of costs of toll and amortization on rights to operate completed expressway sectors, amounted to Baht 2,185 Million, representing a decrease from the previous year by Baht 943 Million or 30.1 percent, mainly from a decrease in amortization on rights to operate completed expressway sectors which related to the traffic volume and appropriate cost management with the situation.

2. RAIL BUSINESS

Revenue from Rail business amounted to Baht 3,454 Million, representing a decrease from the previous year by Baht 1,066 Million or 23.6 percent. Revenue from O&M services of the Purple Line Project was as stated in the agreement. Farebox revenue from the MRT Blue Line Project decreased from the COVID-19 which was widely affect in the series of wave, resulted to a decrease in ridership when compared with the previous year. The average ridership in the year 2021 was at 146,700 trips per day representing a decrease by 43.7 percent, and the average ridership per working day was at 172,300 trips per day representing a decrease by 44.2 percent.

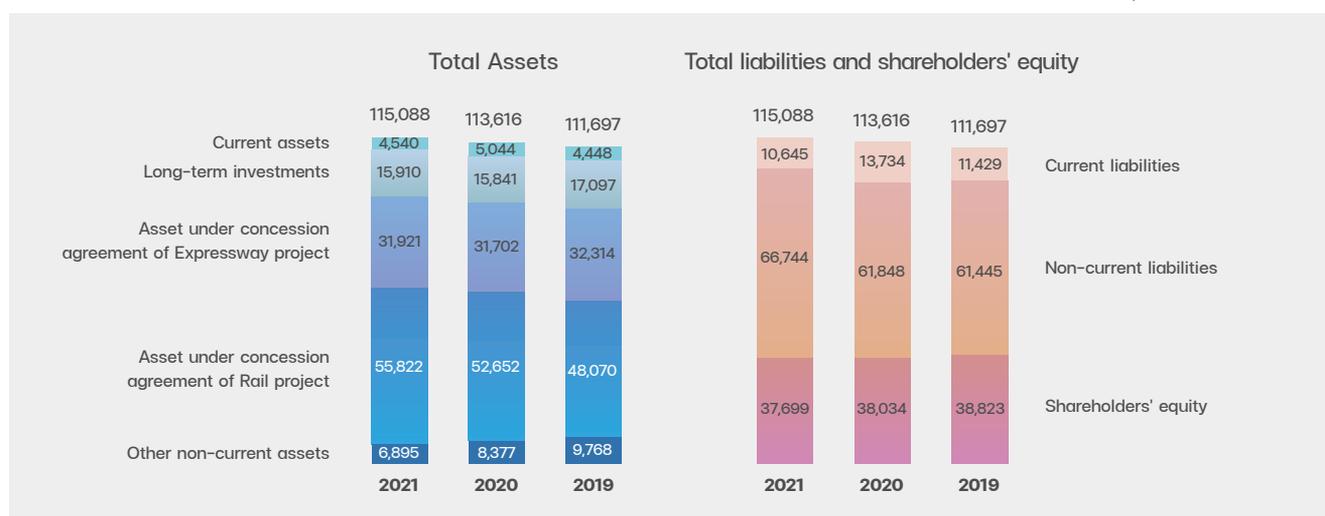
Cost of Rail business consisted of costs of farebox, O&M cost and amortization of intangible asset under concession agreement of the MRT Blue Line Project. The cost was at Baht 4,520 Million, representing a decrease from the previous year by Baht 489 Million or 9.8 percent.

3. COMMERCIAL DEVELOPMENT BUSINESS

Commercial Development revenue was at Baht 822 Million which had not increase from the previous year due to the effect of COVID-19 and the Company's measures to support the business alliances. Cost of Commercial Development business was at Baht 284 Million representing a decrease from the previous year by Baht 5 Million or 1.7 percent.

Financial Position

(Unit: Million Baht)



Assets

As at December 30, 2021, the Company and its subsidiaries had total assets amounted to Baht 115,088 Million, representing an increase by Baht 1,472 Million or 1.3 percent when compared with total assets as at December 31, 2020, mainly from an increase in asset under concession agreements of MRT Blue Line, substantially from prepaid project remuneration in accordance to the concession agreement. Approximately 76.2 percent of assets was the asset under concession agreement and 13.8 percent was the long-term investment in other companies.

Liabilities and Shareholders' Equity

Total liabilities amounted to Baht 77,389 Million, representing an increase from the previous year by Baht 1,807 Million or 2.4 percent from the issuance of sustainability debentures with the total amount of Baht 6,000 Million to repay matured debentures. Interest-bearing debts, excluding loan of MRT purple line project which repaid by MRTA, was at Baht 64,282 Million representing an increase of Baht 3,716 Million. For the year 2021, cash from operating activities was at Baht 2,870 Million, representing a decrease from the effect of COVID-19, whereas significant cash out flow amount to Baht 5,733 Million from payment in capital expenditures and investing in amount of Baht 2,223 Million, interest payment in the amount of Baht 1,981 Million, and dividend payment in amount of Baht 1,529 Million. The company's commitments and contingent liabilities consisted of capital commitments, service commitments, operating lease commitments, guarantees, and other commitments, as described in Note 39 to the financial statements. Total shareholders' equity amounted to Baht 37,699 Million, representing the book value per share of Baht 2.47.

Significant Financial Ratios Analysis *

The COVID-19 pandemic extremely affected to the company's main revenues which related to travelling, resulting to a decrease in financial ratios from the decline of revenues and profit. For Liquidity ratios, every day the company receives cash from providing services in the main business which is approximated 85 percent of total revenues; therefore, the company have no liquidity issue. Net interest-bearing debt to equity ratio (Net IBD/E) of the year 2021 was at 1.65 times representing an increase from the previous year, but still lower than 2.5 times as stated in loan and debenture agreements.

* Reference to financial ratios in 4.3

4.2 FACTOR OR SITUATION AFFECTING FUTURE PERFORMANCE

The main revenues of the company relate to the travelling of people. In case of the COVID-19 outbreak continues to be severe situation, it may impact on the company's performance and financial position. However, from monitoring the effect of COVID-19 pandemic on Expressway users and Metro passengers, we found that the situation of Omicron coronavirus has not strongly impacts as much as of Delta coronavirus which happened in the year 2021.

4.3 KEY FINANCIAL INFORMATION

(Unit : Baht)

Statement of financial position	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Assets						
Current assets						
Cash and cash equivalents	1,131,367,911	0.98	1,613,584,108	1.42	703,750,307	0.63
Bank deposit for unearned fare box revenue	225,201,031	0.20	224,486,696	0.20	205,697,086	0.18
Trade and other receivables	473,252,353	0.41	548,903,316	0.48	481,786,671	0.43
Current portion of receivable under the concession agreement	1,649,683,274	1.43	1,649,683,274	1.45	1,649,683,274	1.48
Current tax assets	120,971,846	0.11	125,377,096	0.11	128,148,743	0.11
Other current financial assets	765,670,719	0.67	761,275,133	0.67	1,157,746,702	1.04
Other current assets						
Prepaid expenses	92,564,380	0.09	90,825,229	0.08	83,599,640	0.08
Advance payment for service contracts	44,566,316	0.03	17,783,816	0.02	24,639,141	0.02
Spare parts	26,633,266	0.02	-	-	-	-
Others	10,729,409	0.01	11,835,188	0.01	12,526,757	0.01
Total current assets	4,540,640,505	3.95	5,043,753,856	4.44	4,447,578,321	3.98
Non-current assets						
Receivable under the concession agreement, net of current portion	5,911,365,066	5.14	7,561,048,340	6.65	9,210,731,614	8.25
Other non-current financial assets	15,909,924,565	13.82	15,840,737,472	13.94	17,096,827,328	15.31
Investment properties	120,357,493	0.10	120,357,493	0.11	120,357,493	0.11
Building and equipment	383,984,663	0.33	379,278,437	0.33	311,376,837	0.28
Right-of-use assets	139,696,152	0.12	86,514,411	0.08	-	-
Rights to operate expressway sectors	31,920,531,506	27.74	31,701,521,503	27.90	32,253,366,737	28.88
Rights to use sites for expressway construction	-	-	-	-	61,467,080	0.06
Intangible asset under concession agreement of the MRT Blue Line Project	45,368,623,475	39.42	44,683,719,344	39.33	42,338,899,443	37.91
Project cost of the MRT Chalong Ratchadham Line	676,752,990	0.59	660,436,487	0.58	644,950,810	0.58
Prepaid project remuneration	9,775,518,134	8.49	7,307,904,942	6.43	5,086,367,785	4.54
Other intangible assets	48,351,411	0.04	63,165,051	0.06	74,027,004	0.06
Deferred tax assets	16,310,587	0.01	13,651,112	0.01	6,951,994	0.01
Other non-current assets	276,442,889	0.25	153,669,851	0.14	43,867,537	0.03
Total non-current assets	110,547,858,931	96.05	108,572,004,443	95.56	107,249,191,662	96.02
Total assets	115,088,499,436	100.00	113,615,758,299	100.00	111,696,769,983	100.00

(Unit : Baht)

Statement of financial position (continued)	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Liabilities and shareholders' equity						
Current liabilities						
Short-term loans from financial institutions	2,000,000,000	1.74	3,000,000,000	2.64	3,250,000,000	2.91
Trade and other payables	1,492,413,420	1.30	1,744,651,781	1.53	1,938,481,838	1.74
Current portion of long-term loans from financial institutions	3,544,204,069	3.08	3,745,161,069	3.30	3,166,120,069	2.83
Current portion of lease liabilities	44,749,169	0.04	45,512,736	0.04	-	-
Current portion of debentures	3,000,000,000	2.61	4,615,000,000	4.06	2,500,000,000	2.24
Unearned fare box revenue	2,216,885,631	0.19	228,290,262	0.20	212,234,424	0.19
Deposits on stored value ticket	86,567,897	0.08	87,727,497	0.08	79,946,797	0.07
Income tax payable	27,693,411	0.02	41,623,582	0.04	25,467,515	0.02
Current portion of derivative financial liabilities	-	-	11,860,783	0.01	-	-
Other current financial liabilities	102,555,542	0.09	64,602,760	0.06	56,227,880	0.05
Other current liabilities						
Value added tax payable	52,830,593	0.05	64,913,271	0.06	61,238,396	0.05
Withholding tax deducted at source payable	39,536,369	0.03	59,123,553	0.05	99,118,066	0.09
Others	33,041,963	0.02	25,094,642	0.02	40,071,839	0.04
Total current liabilities	10,645,478,064	9.25	13,733,561,936	12.09	11,428,906,824	10.23
Non-current liabilities						
Long-term loans from financial institutions, net of current portion	25,609,412,070	22.25	23,670,054,666	20.83	21,745,560,898	19.46
Lease liabilities, net of current portion	92,659,628	0.08	40,912,590	0.03	-	-
Debentures, net of current portion	37,057,371,553	32.20	34,057,924,287	29.98	35,670,826,818	31.94
Derivative financial liabilities, net of current portion	95,880,794	0.08	173,936,021	0.15	112,685,174	0.10
Provision for long-term employee benefits	770,896,288	0.67	932,330,697	0.82	886,390,430	0.79
Deferred tax liabilities	3,108,954,593	2.70	2,959,530,701	2.60	3,025,459,610	2.71
Other non-current liabilities	9,014,047	0.01	13,782,769	0.02	3,758,883	0.01
Total non-current liabilities	66,744,188,973	57.99	61,848,471,731	54.43	61,444,681,813	55.01
Total liabilities	77,389,667,037	67.24	75,582,033,667	66.52	72,873,588,637	65.24

(Unit : Baht)

Statement of financial position (continued)	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Shareholders' equity						
Share capital						
Registered						
15,285,000,000 ordinary shares of Baht 1 each	15,285,000,000	13.28	15,285,000,000	13.45	15,285,000,000	13.68
Issued and fully paid-up						
15,285,000,000 ordinary shares of Baht 1 each	15,285,000,000	13.28	15,285,000,000	13.45	15,285,000,000	13.68
Premium on ordinary shares	5,816,938,084	5.05	5,816,938,084	5.12	5,816,938,084	5.21
Capital deficit from change in shareholding in subsidiaries	(346,046,294)	-0.30	(264,641,165)	-0.23	(256,942,521)	-0.23
Retained earnings						
Appropriated - statutory reserve	1,502,600,000	1.31	1,464,000,000	1.29	1,379,090,000	1.23
Unappropriated	15,193,997,725	13.20	15,572,592,087	13.71	15,052,068,973	13.48
Other components of shareholders' equity	244,792,547	0.21	117,510,065	0.10	1,504,565,153	1.35
Equity attributable to shareholders of the Company	37,697,282,062	32.75	37,991,399,071	33.44	38,780,719,689	34.72
Non-controlling interests of the subsidiaries	1,550,337	0.01	42,325,561	0.04	42,461,657	0.04
Total shareholders' equity	37,698,832,399	32.76	38,033,724,632	33.48	38,823,181,346	34.76
Total liabilities and shareholders' equity	115,088,499,436	100.00	113,615,758,299	100.00	111,696,769,983	100.00

Note : Financial statement of the year 2019 was reclassified in accordance with the change of financial presentation in 2020.

(Unit : Baht)

Income statement	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Revenues						
Revenue from expressway business	6,450,160,064	56.18	8,144,975,668	56.87	10,302,412,750	50.49
Revenue from rail business	3,454,408,377	30.09	4,519,840,374	31.56	5,022,100,349	24.61
Revenue from commercial business development	822,153,949	7.16	824,644,414	5.76	782,564,040	3.84
Other income						
Gain on sale of investment in financial assets	-	-	3,530,367	0.02	181,078,813	0.89
Gain on reclassification of investment	-	-	-	-	3,408,628,533	16.71
Interest income	227,222,451	1.98	296,044,829	2.07	392,633,384	1.92
Dividend income	492,182,682	4.29	482,715,660	3.37	257,868,552	1.26
Others	35,461,769	0.30	50,809,869	0.35	56,312,532	0.28
Total revenues	11,481,589,292	100.00	14,322,561,181	100.00	20,403,598,953	100.00
Expenses						
Cost of expressway business	1,498,829,128	13.05	1,738,365,018	12.14	1,991,458,088	9.76
Cost of rail business	4,335,390,944	37.76	4,713,365,429	32.91	3,796,981,929	18.61
Cost of commercial development business	223,855,683	1.95	226,069,501	1.58	210,292,457	1.03
Amortisation on rights to operate completed expressway sectors and compensation for site acquisition cost	686,150,894	5.98	1,389,661,862	9.70	4,048,131,964	19.84
Amortisation on intangible asset under concession agreement of the MRT Blue Line Project	245,443,987	2.14	359,429,944	2.51	263,394,239	1.29
Selling expenses	91,863,188	0.80	169,847,473	1.19	139,622,388	0.68
Administrative expenses	1,068,048,787	9.30	1,176,670,273	8.21	1,196,759,191	5.87
Total expenses	8,149,582,611	70.98	9,773,409,500	68.24	11,646,640,256	57.08
Operating profit	3,332,006,681	29.02	4,549,151,681	31.76	8,756,958,697	42.92
Share of profit from investments in associates	-	-	-	-	172,910,981	0.85
Finance cost	(2,187,044,061)	-19.05	(2,112,506,968)	-14.75	(1,723,062,346)	-8.45
Profit before income tax expenses	1,144,962,620	9.97	2,436,644,713	17.01	7,206,807,332	35.32
Income tax expenses	(133,911,711)	-1.16	(381,919,095)	-2.66	(1,754,942,103)	-8.60
Profit for the year	1,011,050,909	8.81	2,054,725,618	14.35	5,451,865,229	26.72
Profit attributable to						
Equity holders of the Company	1,010,097,493	8.80	2,051,090,045	14.32	5,434,819,325	26.64
Non-controlling interests of the subsidiaries	953,416	0.01	3,635,573	0.03	17,045,904	0.08
	1,011,050,909	8.81	2,054,725,618	14.35	5,451,865,229	26.72
Basic earnings per share						
Profit attributable to equity holders of the Company	0.07		0.13		0.36	

(Unit : Baht)

Statement of comprehensive income	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Profit for the year	1,011,050,909	8.81	2,054,725,618	14.35	5,451,865,229	26.72
Other comprehensive income						
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>						
Gain (loss) from cash flow hedges, net of income tax	71,932,808	0.63	(58,489,304)	-0.41	(72,701,199)	-0.36
Gain on valuation of available-for-sale securities, net of income tax	-	-	-	-	482,287,536	2.36
Share of other comprehensive income of associate recognised due to reclassification of investment	-	-	-	-	(9,019,502)	-0.04
Share of other comprehensive income from associates	-	-	-	-	(1,929,640)	-0.01
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of income tax</i>	71,932,808	0.63	(58,489,304)	-0.41	398,637,195	1.95
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>						
Gain (loss) on investments in equity designated at fair value through other comprehensive income, net of income tax	55,349,674	0.48	(1,359,788,928)	-9.49	-	-
Actuarial gain, net of income tax	178,424,063	1.55	26,618,808	0.18	(77,357,601)	-0.38
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax</i>	233,773,737	2.03	(1,333,170,120)	-9.31	(77,357,601)	-0.38
Other comprehensive income for the year	305,706,545	2.66	(1,391,659,424)	-9.72	321,279,594	1.57
Total comprehensive income for the year	1,316,757,454	11.47	663,066,194	4.63	5,773,144,823	28.29
Total comprehensive income attributable to:						
Equity holders of the Company	1,315,788,120	11.46	659,430,621	4.60	5,755,875,433	28.21
Non-controlling interests of the subsidiaries	969,334	0.01	3,635,573	0.03	17,269,390	0.08
	1,316,757,454	11.47	663,066,194	4.63	5,773,144,823	28.29

(Unit : Baht)

Cash flow statement	2021	2020	2019
Cash flows from operating activities			
Profit before tax	1,144,962,620	2,436,644,713	7,206,807,332
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:			
Amortisation and depreciation	1,128,606,378	1,857,979,562	4,026,462,692
Allowance for expected credit losses (reversal)	2,809,203	(548,274)	(3,971,546)
Withholding tax deducted at source written off	1,060,664	605,265	-
Gain on sale of investments in financial assets	-	(3,530,367)	(181,078,813)
Gain on fair value adjustments of financial assets	(4,395,586)	(14,508,454)	(24,997,738)
Gain on reclassification of investment	-	-	(3,408,628,533)
Gain on disposal/write-off of equipment, intangible assets, right-of-use asset, and intangible asset under concession agreement of the MRT Blue Line Project	(6,071,738)	(2,876,113)	(1,331,425)
Project remuneration expense	220,635,284	350,690,055	393,651,735
Compensation for site acquisition cost	-	61,467,080	397,839,441
Provision for long-term employee benefits	93,139,079	109,639,862	102,201,396
Share of profit from investments in associates	-	-	(172,910,981)
Unrealised (gain) loss on exchange rate	(283,854)	22,541	276
Effect of reduction in rental expenses	(3,381,343)	(19,715)	-
Interest income	(227,222,451)	(296,044,829)	(392,633,384)
Dividend income	(492,182,682)	(482,715,660)	(257,868,552)
Interest expenses	2,163,893,619	2,080,911,700	1,670,220,735
Profit from operating activities before changes in operating assets and liabilities	4,021,569,193	6,097,717,366	9,353,762,635
Operating assets (increase) decrease			
Bank deposit for unearned fare box revenue	(714,335)	(18,789,610)	(55,680,976)
Trade and other receivables	106,486,620	(55,567,070)	(7,760,875)
Receivable under the concession agreement	1,649,683,274	1,649,683,274	1,649,683,274
Other current assets	(42,050,038)	12,089,492	(11,393,416)
Other non-current assets	(2,232,967)	11,443,912	(3,048,985)
Cash paid for project remuneration	(2,679,657,407)	(2,559,221,912)	(1,894,886,245)
Operating liabilities increase (decrease)			
Trade and other payables	(186,562,594)	157,100,847	181,841,193
Unearned fare box revenue	(6,404,631)	16,055,838	49,117,295
Deposits on stored value ticket	(1,159,600)	7,780,700	14,681,511
Other current liabilities	14,230,241	(41,394,911)	34,359,081
Other non-current liabilities	(4,768,722)	11,563,379	(2,134,042)
Cash paid for long-term employee benefits	(31,543,409)	(36,876,553)	(11,000,415)
Cash paid for compensation for site acquisition cost	-	-	(1,616,000,000)
Net cash flows from operating activities	2,836,875,625	5,251,584,752	7,681,540,035
Cash received from interest income	227,222,838	296,045,709	392,634,064
Cash paid for income tax	(194,699,585)	(196,270,863)	(332,798,583)
Net cash flows from operating activities	2,869,398,878	5,351,359,598	7,741,375,516

(Unit : Baht)

Cash flow statement (continued)	2021	2020	2019
Cash flows from investing activities			
Cash received from sales of financial assets designated at FVTPL	-	3,904,702,827	-
Cash paid for purchase of financial assets designated at FVTPL	-	(3,492,504,112)	-
Cash received from sale of financial assets designated at FVOCI	-	2,310,374	-
Cash paid for purchase of financial assets designated at FVOCI	-	(526,342,927)	-
Cash received from sales of current investments	-	-	17,447,889,696
Cash paid for purchase of current investments	-	-	(17,290,610,050)
Cash paid for purchase of investments in subsidiary	(123,149,687)	(11,470,313)	(269,240,000)
Cash received from sales of investments in associate	-	-	398,386,200
Cash received from sales of other long-term investments	-	-	78,219,853
Increase in other long-term investment	-	-	(400,000,000)
Cash received from sales of equipment and right-of-use asset and intangible asset under concession agreement of the MRT Blue Line Project	7,848,476	5,355,862	1,695,689
Purchase of equipment	(87,435,912)	(127,506,633)	(46,552,497)
Cash received from dividend income	492,182,682	482,715,660	488,801,682
Cash paid for the improvement of expressway	(845,461,302)	(827,337,637)	(706,974,948)
Cash paid for intangible asset under concession agreement of the MRT Blue Line Project	(1,102,154,189)	(2,987,424,067)	(6,840,809,764)
Cash paid for project cost of the MRT Chalong Ratchadham Line	(61,270,758)	(39,120,693)	(29,307,405)
Interest expenses capitalised as cost of projects	-	(90,275,175)	(378,623,301)
Increase in other intangible assets	(11,515,081)	(17,419,060)	(15,722,417)
Net cash flows used in investing activities	(1,730,955,771)	(3,724,315,894)	(7,562,847,262)
Cash flows from financing activities			
Cash received form short-term loan from financial institution	5,200,000,000	9,300,000,000	4,882,000,000
Repayment of short-term loans from financial institution	(6,200,000,000)	(9,550,000,000)	(4,448,000,000)
Cash received from long-term loans from financial institutions	5,000,000,000	5,299,998,000	6,530,000,000
Repayment of long-term loans from financial institutions	(3,403,941,069)	(2,853,940,069)	(3,041,760,069)
Cash payment for lease liabilities	(67,283,541)	(44,427,542)	-
Cash received from debentures	6,000,000,000	3,000,000,000	5,000,000,000
Cash paid for redemption of debenture	(4,615,000,000)	(2,500,000,000)	(5,000,000,000)
Cash paid for financial fees	(25,042,356)	(8,815,078)	(11,516,532)
Interest paid	(1,980,892,338)	(1,984,375,214)	(1,618,951,836)
Dividend paid	(1,528,500,000)	(1,375,650,000)	(2,292,750,000)
Net cash flows used in financing activities	(1,620,659,304)	(717,209,903)	(978,437)
Net increase (decrease) in cash and cash equivalents	(482,216,197)	909,833,801	177,549,817
Cash and cash equivalents at beginning of year	1,613,584,108	703,750,307	526,200,490
Cash and cash equivalents at end of year	1,131,367,911	1,613,584,108	703,750,307

Financial Ratios	Unit	2021	2020	2019
LIQUIDITY RATIO				
1. Liquidity Ratio	Time	0.32	0.28	0.28
2. Quick Ratio	Time	0.29	0.26	0.26
3. Cash Flow Ratio	Time	0.09	0.31	0.50
PROFITABILITY RATIO				
4. Gross Profit Margin	%	34.84	37.53	35.99
5. Operating Profit Margin	%	39.33	45.21	56.59
6. Other Income to Total Income	%	6.70	5.93	5.34
7. Cash to Profitability Ratio	%	23.74	56.16	62.66
8. Net Profit Margin	%	8.97	14.60	18.66
9. Return on Equity	%	2.67	5.35	8.38
EFFICIENCY RATIO				
10. Return on Total Assets	%	0.95	2.00	3.24
11. Return on Fixed Assets	%	2.77	5.16	9.80
12. Assets Turnover	Time	0.11	0.14	0.17
FINANCIAL POLICY RATIO				
13. Debt to Equity Ratio	Time	1.87	1.76	1.62
14. Net Interest Bearing Debt to Equity Ratio	Time	1.65	1.52	1.39
15. Interest Coverage Ratio	Time	2.17	3.38	7.06
16. Net Debt to EBITDA	Time	16.16	10.56	6.65
17. Debt Service Coverage Ratio	Time	1.15	1.98	3.48
18. Dividend Payout Ratio	%	121.06	74.52	42.19
PER SHARE DATA				
19. Book Value per Share	Baht	2.47	2.49	2.54
20. Net Earnings per Share	Baht	0.07	0.13	0.36
21. Dividend per Share	Baht	0.08 ⁽¹⁾	0.10	0.15

Note : ⁽¹⁾ an agenda to be proposed to the 2022 Annual General Meeting of the shareholders for approval

The Company has not presented Accounts Receivable Turnover, Average Collection Period, Accounts Payable Turnover, Average Debt Servicing Period and Cash Cycle because these ratios are not appropriated for consideration of the Company's operation according to the amount of accounts receivable and accounts payable which are not significant for the Company's nature of operation.

Not include transaction related to the novation of the M&E systems under the concession agreement of the MRT Chalong Ratchadham Line Project which the MRTA is fully responsible for both loan repayment and interest expense in accordance to the concession agreement and gain on fair value adjustment of investment due to reclassification.

5 GENERAL INFORMATION AND OTHER SIGNIFICANT INFORMATION

5.1 GENERAL INFORMATION

(1) Securities Registrar

Thailand Securities Depository Company Limited

93 Rachadapisek Road, Dindaeng Subdistrict, Dindaeng District, Bangkok 10400.

Telephone : 0 2009 9382

Fax : 0 2009 9476

(2) Auditor

EY Office Limited

193/136-137 Lake Rajada Office Complex, 33rd Floor, New Rajadapisek Road, Klongtoey District, Bangkok 10110.

Telephone : 0 2264 0777

Fax : 0 2264 0789

(3) Legal Advisor

The Legists Group,

Abdulrahim Place, 9th Floor

No. 990 Rama IV Road, Silom Subdistrict Bangrak District, Bangkok 10500.

Telephone : 0 2636 1111

Fax : 0 2636 0000

(4) Financial Advisor

Advisory Plus Company Limited,

1550 Thanapoom Tower, 10th Floor, New Petchburi Road, Makkasan Subdistrict, Ratchathewi District, Bangkok 10400.

Telephone : 0 2652 7858-64

Fax : 0 2652 7867

(5) Debenture Registrars

Siam Commercial Bank Public Company Limited,

G Tower, Grand Rama 9, 15th Floor, North Wing 9, Rama 9 Road, Huai Khwang Subdistrict, Huai Khwang District, Bangkok 10310.

Telephone : 0 2128 2326-9

Fax : 0 2128 4625

Krung Thai Bank Public Company Limited,

977/2 Phaholyothin Road, Samsen Nai Subdistrict Phayathai District, Bangkok 10400.

Telephone : 0 2298 0831

Fax : 0 2298 0835

(6) Debenture Holders' Representative**Siam Commercial Bank Public Company Limited,**

G Tower, Grand Rama 9, 17th Floor, North Wing 9,
Rama 9 Road, Huai Khwang Subdistrict, Huai Khwang District,
Bangkok 10310,

Telephone : 0 2128 2316-7

Fax : 0 2128 4621

5.2 OTHER SIGNIFICANT INFORMATION

- None -

5.3 LEGAL DISPUTE

- None -

5.4 SECONDARY MARKET IN CASE OF LISTING ON THE STOCK EXCHANGE OF OTHER COUNTRIES

- None -

5.5 REGULARLY CONTACTED FINANCIAL INSTITUTIONS**Bangkok Bank Public Company Limited**

333 Silom Road, Silom Subdistrict,

Bang Rak District, Bangkok 10500,

Telephone : 0 2230 1036

Fax : 0 2230 2722

Krung Thai Bank Public Company Limited,

35 Sukhumvit Road, Khlong Toei, Nuea Subdistrict,

Watthana District, Bangkok 10110,

Telephone : 0 2208 4631-9

Fax : 0 2256 8619

TMB Thanachart Bank Public Company Limited,

3000 Phaholyothin Road, Chom Thong Subdistrict,

Chatuchak District, Bangkok 10900,

Telephone : 0 2299 2469

Fax : 0 2299 2758

Siam Commercial Bank Public Company Limited,

9 Ratchadaphisek Road, Chatuchak Subdistrict,

Chatuchak District, Bangkok 10900,

Telephone : 0 2256 2323

PART

2



CORPORATE
GOVERNANCE
POLICY

6

CORPORATE GOVERNANCE POLICY

6.1 OVERVIEW OF CORPORATE GOVERNANCE POLICY AND PRACTICES

The Board of Directors and management have realized the significance of the principles of the Corporate Governance Code, comprising establishing organizational leadership role and responsibilities of the Board in creating value for the business to attain the sustainable business operations; strengthening effective management and internal control; implementing mechanisms for control and checks and balances intended to ensure the transparent and auditable management; respect for rights and equality of shareholders by encouraging and supporting engagement and communication with shareholders; ensuring disclosure and maintaining financial integrity; and ensuring all groups of stakeholders-oriented management, all of which are crucial factors in adding value and bringing the highest returns to the Company's shareholders with the long-term sustainability.

To boost confidence of all shareholders, investors and stakeholders and development resulting in the good corporate governance of the Company and its subsidiaries on a continuous basis, including understanding of the Board of Directors in the Company's business operations, expectations of stakeholders, opportunities and risks affecting the business operations, the Board of Directors has formulated the corporate governance policy and practices which shall be regularly reviewed at least once a year. In this connection, the Company has publicized the corporate governance policy and practices on its website at <http://www.bemplc.co.th> to allow all shareholders, investors, and stakeholders to acknowledge the practical guidelines and business operations of the Company and communicate to the Company's directors, executives and staff in order that they use as a guideline for business operations and administration.

• CORPORATE GOVERNANCE POLICY

The Company realizes the significance and benefits of good corporate governance to ensure that the Company has the efficient, transparent, auditable management systems in place to help build trust and confidence among shareholders, investors, stakeholders, and all concerned parties, in pursuit of the Company's sustainable growth. To that effect, the Company adheres to the guidelines of the Company's corporate governance policy in accordance with the Principles of Governance Corporate Code covering 8 chapters, namely:

1. Establish Clear Leadership Role and Responsibilities of the Board

Fulfill the duties with awareness and thorough understanding of its leadership roles in supervising and ensuring good management and creating sustainable value for the business; as well as monitor and supervise to ensure that directors and executives comply with their own scope of duties and responsibilities with care and honesty, in accordance with laws, Articles of Association and meeting resolutions.

2. Define Objectives that Promote Sustainable Value Creation

Define business objectives and goals which conform to and promote sustainable value creation for the Company, stakeholders and society, as well as monitor, oversee the formulation of strategies to ensure compliance with business objectives and goals, by appropriately adopting innovations and technologies.

3. Strengthen Board Effectiveness

Establish and review the board structure in terms of size, composition and the proportion of independent directors to ensure appropriateness, ensure the transparent and clear selection and nomination procedures, ensure the remuneration structure which is appropriate for their respective roles and responsibilities, promote the development of skills and knowledge for the performance of their duties on a regular basis, as well as put a limit on the number of listed companies in which the Company's director will hold the directorship to ensure efficiency in performance of duties.

4. Ensure Effective CEO and People Management

Have the recruitment and development procedures for top executives to ensure they have knowledge, skills, experience and qualifications required to drive the organization towards its goals, ensure the appropriate remuneration structure, and have the human resources management and development to ensure that they are knowledgeable, skilled, and experienced.

5. Nurture Innovation and Responsible Business

Nurture and develop the creation of a culture of corporate innovation development to add value to the business according to the constantly changing circumstances, by taking both internal and external stakeholders into account.

6. Strengthen Effective Risk Management and Internal Control

Ensure the appropriate risk management and internal control systems in place, supervise the Company's operations to effectively achieve its objectives, have a procedure in place to handle conflicts of interest and prevent any inappropriate use of assets, information, opportunities and execution of transactions with any related parties to ensure compliance with applicable laws and standards.

7. Ensure Disclosure and Financial Integrity

Ensure the accuracy, completion, adequacy, punctuality, transparency in disclosure of significant financial information and non-financial information of the Company in accordance with relevant rules, standards and practices, ensure the appropriate use of technology in communicating and disseminating information to stakeholders, as well as protect information which affects the Company's securities prices to ensure that the disclosed information can reflect implementation or creation of sustainable value for the business.

8. Ensure Engagement and Communication with Shareholders

Ensure the participatory process so that the Company's shareholders are allowed to participate in decision-making regarding the Company's significant matters, ensure equitable treatment toward and protection of basic rights of the Company's shareholders to ensure that all shareholders are treated equitably, have measures against the improper use of insider information to seek benefit for oneself or for others, which causes damage to shareholders as a whole, as well as encourage the Company's shareholders to exercise their basic rights, take care of shareholders to the greater degree than their legal rights, and refrain from committing any violation or infringement of shareholders' rights.

6.1.1 POLICIES AND PRACTICES RELATING TO THE BOARD OF DIRECTORS

The Board of Directors realizes its responsibilities and roles in policy formulation and supervision to ensure the Company's good management, covering its business objectives, goals, strategies, operating policies, important and adequate resource allocation to achieve the business objectives and goals, as well as monitoring, evaluating and ensuring the reporting of operational results in consistency with laws, the Articles of Association, together with resolutions of the shareholders' meeting, in pursuit of sustainability in the operations and value creation of the businesses.

The Board of Directors complies with the practical principles of the Corporate Governance Code for Listed Companies in various aspects, as follows:

1. The Board of Directors' Structure

The structure of the Board of Directors is considered by the Company in terms of size, composition, proportion of the independent directors, skill, experience, education, capability and expertise, together with gender and age as suitable and necessary for leading the organization to achieve the Company's specified objectives and goals.

- The Board of Directors consists of at least five (5) directors and not less than half of the total number of directors must reside in the Kingdom and the Company's directors must have qualifications as required by law.
- The Board of Directors consists of independent directors at least one-third of the total number of directors, but not less than 3 persons who can independently provide their opinions on the performance of the management, with full qualifications in accordance with the qualification criteria of "Independent Director" under the requirements of the Capital Market Supervisory Board, and have the scope of duties and responsibilities as specified by the SET.
- The Board of Directors consists of representative directors under the Concession Agreement from the Mass Rapid Transit Authority of Thailand (MRTA) and representative directors under the conditions of the Concession Agreement from the Expressway Authority of Thailand (EXAT).
- The Board of Directors consists of persons who work in business from a variety of fields, have qualifications, skills, experience in management and operations beneficial to the Company, have knowledge in concession agreements, provided that at least one of them must

have experience in the main business or industry in which the Company is engaging.

- The Chairman of the Board of Directors and the Managing Director may not be the same person so as to separate between the policy making and supervisory duty and the regular managerial duty. The Board of Directors clearly determines powers and duties of the Chairman of the Board of Directors and the Managing Director. The Chairman of the Board of Directors is an independent director by the definition of the SET and has no relationship with management.

2. Performance of Duty of the Chairman of the Board of Directors and Managing Director

The Chairman of the Board of Directors and the Managing Director may not be the same person so as to separate between the policy making and supervisory duty and the regular managerial duty. The Board of Directors clearly determines powers and duties of the Chairman of the Board of Directors and the Managing Director. The Chairman of the Board of Directors is an independent director by the definition of the SET and has no relationship with management.

3. Consideration on determination of holding a directorship in other listed companies

To ensure that each of the directors, Managing Director and high level executives can dedicate their adequate time to performance of their duties with efficiency, the Board of Directors then considers determining the number of listed companies in which each of the directors, Managing Director and high level executives is allowed to hold a directorship, as follows:

- Holding a directorship in other listed companies by directors

Each director is allowed to hold a directorship in other listed companies not exceeding five companies to achieve efficiency in management.

- Holding a directorship in other listed companies by the Managing Director and the high level executives

The Managing Director and high level executives are allowed to hold a directorship in other listed companies not exceeding five companies, provided that such Managing Director and high level executive must be approved by the Board of Directors.

4. Director Nomination

The Nomination and Remuneration Committee nominates directors who are qualified in terms of skills and experiences which will bring benefits to the Company, to be appointed as directors to replace the directors who are vacating their office, both by early retirement and by rotation, in accordance with the criteria. The qualifications of nominated persons will be considered based on the necessary skills that are still lacking on the Board of Directors, as well as those that are aligned with the Company's business strategies.

5. Term of Office

Pursuant to the Articles of Association, at every annual general meeting, one-third of the number of directors must vacate their offices. If the number of directors is not a multiple of three, then the number nearest to one-third must retire from office. Therefore, the directors have a term of three years, and a retiring director may be re-elected. In this regard, the Company does not fix the number of terms of holding office as a director or the number of other listed companies in which the directors will hold office as directors but considers the suitability of appointment of directors who are due to retire by rotation to resume office.

6. The Board of Directors' Meetings

Pursuant to the Company's Articles of Association, the Board of Directors shall meet at least once every three months, with the Company giving advance notice of the Board of Directors' meeting schedule, as well as the annual main agenda, to the Board of Directors, and at each meeting, a quorum consists of not less than half of the total number of directors. The agenda is determined by mutual discussion between the Chairman of the Board of Directors and the Managing Director. In addition, one meeting among non-executive directors and without

management will be held. The Chairman of the Board of Directors presides over the meeting and the high level executives will attend the meeting to clarify the information in the capacity as persons directly relevant to the work operations.

Moreover, the Board of Directors sets out a policy to prohibit directors and executives, who are connected persons or interested persons in relation to any items to be considered, from attending the meeting or voting on such item, and management gives prior notice to such directors and executives who are not allowed to attend the meeting or vote on such item. In considering who is a connected person and interested person, the Board of Directors takes into account the report on interests which all directors and executives have a duty to submit in accordance with the Board of Directors' policy requiring directors and executives to report their personal interests in order to disclose such information to the Chairman of the Board of Directors and the Audit Committee Chairman.

In 2021, the Board of Directors held 7 meetings, whereby the Company delivered the clearly specified notice of each meeting and agenda 7 days prior to the meeting date and also delivered the supporting documents at least five business days prior to the meeting date, so as to allow the Board to have sufficient time to review them prior to the meeting.

7. Self-Assessment of Board / Subcommittees / Individual Directors/Members

The Board of Directors has a policy to ensure the self-assessment of the Board of Directors and subcommittees at least once a year in accordance with the guidelines of the CG Code. In this regard, the Board of Directors requires that topics of assessment shall be reviewed to ensure appropriateness and conformity to the specified roles, duties, responsibilities, and practical policies.

In 2021, the Company delivered the board and subcommittee self-assessment forms to each of their groups to evaluate the overall performance of the entire Board of Directors and subcommittees, and the self-assessment form of the individual directors/committees in order that the results were proposed to the Board of Directors to consider improving performance, which can be summarized as follows:

Assessment / Survey Results	2021 %	2020 %
1. Overall performance assessment of the Board of Directors		
• Board of Directors	97.33	96.33
• Audit Committee	100.00	97.76
• Executive Board	97.48	97.68
• Nomination and Remuneration Committee	100.00	97.12
• Corporate Governance and Risk Management Committee	92.23	94.44
2. Self-assessment of individual directors/members	96.75	-
3. Ethics compliance survey		
• Complete	97.69	96.31
• Partial	2.31	3.69

The results of overall performance of the Board of Directors and subcommittees indicated the good-excellent levels, with the results of the self-assessment of individual directors/members showing the good-excellent level, while the results of compliance with the Company's code of business ethics were found that most of the directors had completely complied therewith, accounting for 97.69 percent.

8. Assessment of Compliance with the Company's Code of Business Ethics

The Board of Directors sets out the Company's code of business ethics as principles and goals of the Company's business operations, and guidelines for performance of all directors, executives, and staff. Directors, executives, and staff will regularly assess their compliance with the Company's code of business ethics every year.

In 2021, the Company arranged for all directors, executives and staff to assess their compliance with the code of business ethics in order to persuade, encourage and motivate the directors, executives and staff to collaborate to create value for the business while also building their confidence that the legal rights of stakeholders are protected, and all stakeholders and related parties are treated with honesty, transparency and fairness, as well as to encourage all executives and staff to take a responsibility to assume a familiarity and comply with the code of business ethics, together with the Company's relevant policies to be further formulated.

9. Assessment of Performance of the Managing Director

All directors of the Company, except the Managing Director, will constantly assess the performance of the Managing Director on a yearly basis in accordance with the criteria specified by the Nomination and Remuneration Committee. The Nomination and Remuneration Committee is assigned by the Board of Director to propose remuneration and other benefits as appropriate for the Managing Director, by considering the use of the Corporate KPIs in the annual assessment of performance in order to obtain the Board of Directors' approval.

10. Remuneration of Directors and Executives

Remuneration for directors : The Company establishes a clear and transparent policy on remuneration for directors and the Managing Director in line with the scope of duties and responsibilities of each director serving as chairman or subcommittee member, subject to review by the Nomination and Remuneration Committee. The remuneration is at the same level as that in the same industry and sufficiently high to retain the qualified directors.

Remuneration for Managing Director : The Nomination and Remuneration Committee considers remuneration for the Managing Director in accordance with the Company's operational results under the Corporate KPIs and the Managing Director's performance and propose the same to the Board of Directors for consideration each year.

Remuneration for executives : Remuneration for executives, excluding the Managing Director, is in accordance with the principles and policies determined by the Executive Board corresponding to the Company's operational results and performance of each executive.

11. Development of Directors and Executives

• Directors and Executives Training

The Board of Directors has a policy to support and facilitate training and learning for its directors and executives to ensure their continued improvement and performance, involving both internal and external training courses. All directors must attend training for an understanding of the performance of their duties in their capacity as directors.

The Company's Board of Directors and high level executives realize the significance of their participation in training or seminars in various courses or development of their knowledge and skills. The Board of Directors has attended training courses organized by the Thai Institute of Directors Association (IOD), namely, Director Certification Program (DCP), Director Accreditation Program (DAP), Board Performance Evaluation, The Role of Chairman (RCP), Audit Committee Program, Role of Compensation Committee (RCC).

In 2021, one of the Company's directors, namely, Mrs. Tasanuch Thammachot, received training on the Director Accreditation Program (DAP 186/2021).

• Orientation for New Directors

The Board of Directors determines the operational practices for the Company to arrange for orientation for newly-appointed directors and to provide documents or briefings for the new directors to understand the business and performance of duties as directors. The Board of Directors assigns the Managing Director, the Company Secretary, and the Managing Director Office to arrange for orientation for newly-appointed directors by convening a meeting with the relevant directors and/or executives and/or officers for clarification and answering questions.

In 2021, the Company appointed three new directors, whereby the Company, in compliance with the practices, briefed the new directors about the Company's information as well as preparing documents and summary information for the new directors, such as, information relating to the Company, listed company director's handbook, the Corporate Governance Code, the Company's code of ethics, power and duties of the Board of Directors, and the annual schedule of the Board of Directors' meetings. Furthermore, the Company had the directors attend training courses on the recommendation of the SEC Office, organized by the Thai Institute of Directors Association (IOD).

12. Succession Plan

The Board of Directors prepares and reports on a succession plan for the positions of Managing Director and the high level executives and in the primary line, taking into account the performance, potentials, and readiness of each person. In this regard, the Company makes preparations for those potential successors in the development of their knowledge, competency, and skills as required for their work positions for succession in the event that the Managing Director or executives in the key positions are not able to perform duties.

The Company requires promotion to be considered every year under the specified criteria for development of personnel who have good performance and competency for their advancement to a higher position in accordance with the staff's line of command, both the middle level executives and staff. The promotion consideration committee, comprising the Managing Director and executives at the General Manager level or higher or the middle level executives, shall consider this matter in accordance with the clearly specified criteria. With regard to the implementation of strategy and succession plan of the high level executives, who may be changed or vacate office by rotation or retirement, the Nomination and Remuneration Committee's meeting shall review the criteria and select knowledgeable, competent and qualified persons, whereby the Board of Directors shall consider appointing candidates to hold the office of Managing Director, and the Executive Board shall consider appointing executives at the Assistant Managing Director level or higher.

13. Interests of Directors and Executives

• Report on interests of directors and executives

The Board of Directors imposes a duty on its directors and executives to report on their personal interests and disclose information on their holdings of directorships or executive positions in other legal entities, and their shareholdings in other legal entities in excess of 25 percent of total voting shares and this obligation applies to both reporters and their related persons. This is to ensure that the Board of Directors has information in support of its consideration and approval of execution of transactions of the Company and its subsidiaries with accuracy and transparency in compliance with the relevant rules and regulations.

The Company Secretary keeps such reports on interests of directors and executives, and also provides copies of such reports to the Chairman of the Board of Directors and the Audit Committee Chairman within seven business days from the date of the Company's receipt of such reports.

- **Interested directors' participation in the meeting**

The Board of Directors sets out a policy to prohibit its directors and executives, who are connected persons or interested persons in relation to any agenda items to be considered, from participating in the meeting and voting on such items. The Company Secretary gives prior notice to such interested directors and executives to express their intention not to participate in the meeting nor vote on such item. To determine whether a director/ executive is a connected person and interested person, the Board of Directors will consider the reports on interests which all directors and executives have a duty to prepare and submit to the Chairman of the Board of Directors and the Audit Committee Chairman.

14. Supervision of Subsidiaries

The Board of Directors of the Company set out criteria and guidelines for supervision and control of management of the subsidiaries to ensure that operations of the Company's subsidiaries are conducted in compliance with the business policy and in line with the Corporate Governance Code, and to safeguard investment benefits of the Company and its shareholders. In this regard, the Company has assigned its subsidiaries to yearly review the respective internal control systems to ensure that it is sufficient and appropriate, whereby the Internal Audit Office of the Company shall regularly review, follow up and evaluate compliance with the good internal control principles, as specified in the annual audit plan.

In 2021, Miss Panan Tosuwanthaworn, Deputy Managing Director, Accounting & Finance, and Mr. Anawash Suwanaritto, Deputy Managing Director, Business Development & Expressway Operations, were appointed by the Board of Directors as the Company's representatives to serve as directors of NECL and BMN, to supervise the subsidiary and ensure that it has the same criteria regarding corporate governance principles as the Company, as well as to supervise the collection of information and accounting records of the subsidiary in order for the Company to examine and compile for preparation of consolidated financial statements in a timely manner.

15. Anti-Corruption

The Company has an anti-corruption policy as well as written guidelines for staff at all levels to use as a guideline for performing their duties in order not to cause disgrace to the Company, requiring that under any circumstances, they refrain from accepting any items or benefits from business partners, contractual parties, or persons with an interest in the Company's business, while remaining committed to adhering to fair business practices on a basis of decision-making and benchmark for price, quality, including services in a transparent and auditable manner.

6.1.2 POLICIES AND PRACTICES RELATING TO SHAREHOLDERS AND STAKEHOLDERS

- **Policies and practices relating to shareholders**

The Board of Directors realizes and values shareholders' fundamental rights in determining the direction of the business operations or decision-making on matters which are significantly critical to the Company while also supporting engagement and communication with shareholders, by encouraging shareholders to exercise their rights to the fullest through the shareholders' meeting, without taking actions which violate or infringe their rights, as follows:

Schedule for Shareholder's Meeting

The Company has scheduled an ordinary general meeting of shareholders, which shall be held once a year, within 4 months from the last date of the Company's fiscal year, and in case of urgency where an agenda must be proposed as a special case, with such agenda affecting or concerning the interests of shareholders or relating to applicable conditions, or rules, laws, which must be approved by shareholders, the Company will call an extraordinary general meeting of shareholders on a case by case basis.

In 2021, due to the situation of the outbreak of COVID-19 in Thailand, which continued to worsen, the Company then held the 2021 Annual Ordinary General Meeting of Shareholders via electronic media (E-AGM) on April 28, 2021, which was broadcast live from the Auditorium Room, Floor G, Building A, Bangkok Expressway and Metro Public Company Limited (Branch Office 2) No. 189 Rama IX Road, Huai Khwang Subdistrict, Huai Khwang District, Bangkok 10310.

Despite the fact that the Company was facing the situation of the outbreak of Covid-19, the Company remained committed to adhering to the guidelines of the AGM Checklist of the Thai Investors Association, the Thai Listed Companies Association, and the Office of the Securities and Exchange Commission (SEC Office). As such, in 2021, the Company achieved the same perfect score of 100 as it did in 2020. To that effect, the Company has proceeded as follows:

1) Actions Prior to the Date of the Shareholders' Meeting

1.1 Provision of Information prior to Shareholders' Meeting

The Board of Directors ensures that the Company gives a notice of the meeting, together with agenda items and opinions of the Board on each agenda item, to the SET in accordance with the rules on disclosure, and such notice is posted on the Company's website on the following business day; as well as ensuring that the Company prepares the notice of the meeting which contains detailed explanations, facts and reasons in support of each agenda item, date, time, place, including details relating to the documents or evidence in support of participation in the meeting, in both Thai and English versions, for the convenience of foreign shareholders, thereby allowing all shareholders' acknowledgement and clear understanding, while also ensuring that the Company gives prior notice to shareholders on rules and regulations in the conduct of the meeting, voting procedures, including their voting rights.

In 2021, the Company required that the notice of the meeting has been disseminated on the Company's website in advance 30 days, since March 26, 2021, and the notice of the meeting was also submitted to Thailand Securities Depository Company Limited, as the Company's share registrar, for delivery of the same to shareholders 21 days prior to the meeting date, i.e., April 5, 2021, with such notice of the meeting being published in local newspapers, both in Thai and English versions, for three consecutive days prior to the meeting date, namely, April 7-9, 2021, so as to allow shareholders to have time to consider the details of each agenda item. Furthermore, the shareholders' meeting was proceeded in accordance with the order of agenda as specified in the notice of the meeting without adding any agenda to the meeting which was not given prior notice to shareholders in the meeting, so that shareholders had time to study the information for support of their consideration of each agenda item.

1.2 Protection of Minority Shareholders' Rights

To enable shareholders to exercise their rights to propose any matters relating to the Company's significant changes, the Company, therefore, adopts a policy to fairly and equally allow all shareholders to exercise their rights to propose agenda items to the shareholders' meeting and to nominate qualified persons for appointment as directors via the channels announced on the Company's website. Shareholders may exercise such rights three months prior to the end of the accounting period. In this regard, the Board of Directors considers incorporating agenda items proposed by shareholders as appropriate. As for the persons nominated for appointment as directors, the management proposes such names to the Nomination and Remuneration Committee for further submission to the Board of Directors and the shareholders' meeting. In addition, shareholders are allowed to exercise their rights to appoint directors on an individual basis in the agenda item of appointment of directors, in respect of which shareholders may vote on an individual basis.

1.3 Shareholders' Participation in the Shareholders' Meeting

The Company realizes and gives priority to shareholders' rights and encourages their participation, whereby the Board of Directors clearly sets out in the corporate governance policy that the Company must support all groups of shareholders, particularly minority shareholders, foreign shareholders, and institutional shareholders, to exercise their rights without limitation to only such rights provided by laws. In this regard, the Company must not take any actions which violate or infringe shareholders' rights and also promote shareholders' right to decide on significant changes, by ensuring that the shareholders have been provided with the Company's sufficient information. Furthermore, the Company prepares documents in both Thai and English versions for clear acknowledgment and understanding of all shareholders.

1.4 Appointment of Proxy to Attend the Shareholders' Meeting

In case it is inconvenient for any shareholder to attend the meeting in person, the Company prepares proxy forms for enabling the shareholders to decide among themselves how they wish their votes to be cast, and gives them an option of appointing the Company's

independent director nominated by the Company as their proxy to exercise the right to attend the meeting and vote on each agenda item on their behalf. Three available proxy forms under the law are prepared, as follows:

- Proxy Form A is a general simple proxy form (for shareholders in all cases);
- Proxy Form B is a proxy form with specific details;
- Proxy Form C is used only by foreign shareholders who appoint a custodian in Thailand.

The Company has disclosed on the Company's website for shareholders to choose and use them as appropriate. Furthermore, the Company prepares duty stamps available for free for shareholders who appoint their proxies to attend the meeting.

In 2021, due to the situation of the COVID-19 outbreak, the Company followed the SET's policies, by encouraging 1,071 shareholders to appoint the Company's independent director as their proxy, totaling 2,051,547,084 shares.

1.5 Facilitation to Shareholders' Exercise of their Rights to Attend the Meeting and Vote

In the ongoing situation of the COVID-19 outbreak, the Company has held the E-Meeting in accordance with the Emergency Decree on Electronic Media Conferences B.E. 2563 (2020) and the Announcement of the Ministry of Digital Economy and Society Re: Standards for Maintaining Security of Meetings via Electronic Means B.E. 2563 (2020). Therefore, the shareholders or proxies to attend the E-Meeting must register to attend the E-Meeting and verify their identities by completing and submitting a meeting attendance request form via Web browser or scanning a QR Code to log in to the system, in advance 7 business days before the meeting date until the meeting is adjourned. In 2021, the Company had allowed shareholders to register for attending the meeting from April 19-28, 2021 (except Saturday - Sunday).

1.6 Shareholders' Opportunity to Ask Questions in advance

To ensure communication and engagement with shareholders, the Company provides an opportunity for its shareholders to propose agenda items or send questions or comments in advance, under the criteria and process which are publicly disclosed on the Company's website

at www.bemplc.co.th, or via E-mail address: companysecretary@bemplc.co.th, Tel.: 0 2641 4611, Fax: 0 2641 4610, or by post, to the Directors Office & Compliance Group, Bangkok Expressway and Metro Public Company Limited (Branch Office 1) No. 238/7 Asoke-Dindaeng Road, Bangkok Subdistrict, Huai Khwang District, Bangkok 10310. In this regard, the Company will consider answering the questions via appropriate channels or further clarify in the shareholders' meeting.

In preparation for the 2022 Annual Ordinary General Meeting of Shareholders, the Company had allowed shareholders to propose agenda items or send questions in advance via the website from October 1, 2021, to December 31, 2021, of which shareholders were widely notified via the SET's website.

2) Conduct of the Shareholders' Meeting

As a result of the situation of the COVID-19 outbreak, the 2021 Annual Ordinary General Meeting of Shareholders was held via electronic media (E-AGM) by various practices and operating principles as follow:

2.1 Use of Technology in the Meeting

The Company uses the electronic conferencing system (Cisco Webex Meeting) and the Inventech Connect system to support Web browser, PC, iOS and android for access to the Cisco Webex Meeting system and the Inventech Connect system and processing with a computer program for the meeting attendance registration and vote counting, in order to assure accuracy, precision, and convenience, and to be able to display the results of the vote counting in a prompt and fast manner.

2.2 Directors' Participation in the Shareholders' Meeting

The 2021 Annual Ordinary General Meeting of Shareholders was attended by 14 directors out of a total of 14 directors (the proportion of directors attending the meeting was 100 percent). The Chairman of the Board of Directors, the Audit Committee Chairman, chairs of various subcommittees, the Managing Director, and the Management Team of the Company attended such shareholders' meeting to answer shareholders' questions and listen to their suggestions.

2.3 Conduct of the Shareholders' Meeting

Prior to the proceedings of the shareholders' meeting, the Company will introduce the Board of Directors, the Management Team, the auditor, and the legal advisor, who acts as a mediator and witness, to the meeting, and then clearly explain all the rules, together with the methods of counting the votes of shareholders who must vote on each agenda item in accordance with the Company's Articles of Association, including the exercise of voting rights in each agenda item. In addition, once information has been provided according to the agenda, the Chairman will allow all attendees to express their opinions, provide suggestions, and ask questions in each agenda item, with the Chairman and executives clearly answering the questions to the point and giving priority to all questions, and thereafter, the meeting is thus requested to vote on each agenda item.

In casting votes, one share is equal to one vote (one share one vote), which will be cast in the meeting via electronic system, with shareholders having the options to vote "Agree", "Disagree" or "Abstain from Voting".

Normally, a majority of votes of shareholders who attend the meeting and cast votes is applicable. Agenda items on the determination of remuneration for directors must be passed by not less than two-thirds of all votes of the shareholders who attend the meeting. As for other issues, votes are in accordance with the Articles of Association, laws and relevant regulations. Agenda items for acknowledgement require no resolution.

2.4 Vote counting or examination in the shareholders' meeting

To ensure transparency, compliance with the laws and the Articles of Association, the Company provides for a legal advisor to count or inspect the counting of votes to ensure transparency and compliance with the laws and the Articles of Association.

The Company would introduce the examiners of vote counting to the meeting and has them recorded in the minutes of the shareholders' meeting. In casting votes

on each agenda item, the Company uses the barcode system to record such votes to ensure that the voting results are expeditiously displayed to the meeting. Voting results of the meeting, favorable, unfavorable, abstaining votes, and voided voting cards, would be also displayed. The Company discloses resolutions, together with voting results on each item to the meeting, and also disseminates such resolutions via the SET's system as well as making such resolutions and minutes of the meeting available on the Company's website for the shareholders' information and examination of voting results in a rapid manner.

3) Preparation of Minutes of the Shareholders' Meeting and Disclosure of the Meeting' Resolutions

The Company has disclosed resolutions of the shareholders' meeting in each item to the SET via the SETLink system within the shareholders' meeting day, with such resolutions being available on the Company's website for shareholders' acknowledgement of the information and review of the voting results, together with cast votes in a rapid manner. Furthermore, the Company has prepared the minutes of the shareholders' meeting which contain clearly separated agenda, with an emphasis on accuracy and completeness, comprising information on the list of directors attending the meetings / the number of shareholders / shares present at the meeting (in person/by proxy) / brief explanation on material issues, such as voting procedures, and display of voting results, to the meeting for acknowledgment prior to conducting the meeting, names of persons asking questions, questions-answers, or opinions in brief, together with the meeting's resolutions, divided into agreeing, disagreeing, abstaining from vote, and voided cards. The Company has submitted the minutes of the shareholders' meeting to the SET and the SEC within the specified period of 14 days, and has publicized such minutes together with video recordings of such meeting via the Company's website at www.bemplc.co.th, since May 11, 2021, in order to increase the channel for information for shareholders to consider the minutes of the meeting.

- **Policies and Practices Relating to Stakeholders**

The Company has a clear policy which focuses on and realizes rights of every group of all stakeholders, whether inside, such as, staff and executives of the Company and its subsidiaries, or outside, such as, customers, business related persons, lenders, traders, society and communities where the Company is located, nearby schools, government sector, including competitors, and other relevant authorities. Any stakeholder wishing to contact or have any comments may directly contact directors or the Company Secretary. In addition, the Board of Directors has laid down the corporate governance policy that requires the Company to treat stakeholders based on their rights as specified by applicable laws without any actions in violation of stakeholders' right; and compensation measures in case any stakeholder sustains any damage arising from violation of the rights; as well as focuses on its operations with respect to human rights. The Company has continued to take care of stakeholders in accordance with the policies, as follows:

- 1) **Customers:** The Company has a commitment to provision of quality, standard and reliable services as well as taking into account health, safety and fairness, keeping customers' information confidential, following up and evaluating customers' satisfaction for the purpose of development and improvement of services, together with advertisement, public relations and sales promotion, in response to customers' needs to have access to the mass transit system and routes which save their travelling time in Bangkok and its surrounding provinces. Work plans/programs are also continuously set out for improvement of the expressway and metro services for users to ensure a more rapid and convenient service with a standard safety, and adherence to rules and regulations of service provision.
- 2) **Business counterparts:** The Company strictly discharges its obligations under the Agreements with EXAT and MRTA in its capacity as a contractual party, and fairly treats its business counterparts on the basis of equitable and impartial treatment, without discrimination. The Company also complies with conditions, rules, regulations, mutual practices, and promotes good relationships, which are clearly written in the Company's code of business ethics, along with the work procedures in accordance with ISO 9001 Quality Management System. This is to ensure its collaboration with EXAT and MRTA to provide efficient and regular services. In this regard, the Company arranges for monthly performance satisfaction assessment in order to develop and improve the efficiency of the operations. According to the assessment results, both EXAT and MRTA are completely satisfied with the Company's collaboration.

Moreover, the Company organizes quarterly meetings between its operating staff and EXAT's personnel and monthly meetings with MRTA, which not only enhance the efficiency and results in the service users' satisfaction but also minimizes conflicts or impacts which may give rise to disputes over joint operations between both parties.

- 3) **Traders / Contractors:** The Company has a commitment to the procurement of standard goods and service, for the purpose of development and maintenance of sustainable relationships with traders, with the clear objectives in terms of quality of goods and service worth its value, technical standard, and creditability. The Company, therefore, provides fair and equal procurement procedures for all traders and follows the procedures in a systematic way in compliance with the work procedures regarding procurement and conditions of contracts or agreements with fairness in accordance with the requirements of ISO 9001 and ISO 14001 Quality Management Systems.
- 4) **Lenders:** The Company strictly complies with the conditions of credit facilities agreements, guarantees, and capital management and ensures equitable and fair treatment towards all lenders in order to build confidence for financial institutions, fund sponsors for the Company's projects, without committing violation of any agreed terms, prepares accurate financial reports, and maintains credibility for lenders with accuracy, completeness, timeliness and continuity.
- 5) **Debenture holders:** The Company issues debentures in accordance with applicable requirements, laws and notifications of the SEC and strictly complies with policies, objectives and resolutions of the shareholders' meeting, and also realizes the significance of its responsibility to fulfill commitments in accordance with the requirements regarding the debenture issuer's rights and duties, including relevant contractual conditions.
- 6) **Staff:** The Company considers staff as a key resource behind its business movements and as a crucial factor to the Company's sustainable success and growth, and then clearly sets out the staff practices, as suitable for each work position, and has respect for human rights, for instance, determination of remuneration and other benefits with fairness, provision of welfare benefits not less than that provided by law or higher as appropriate, taking into account staff's hygiene and safety at work, provision of training, development of competency and support of career advancement, as well as providing staff opportunity to improve their important and essential skills in connection with working or in any other fields, etc. In this regard, the Board of Directors has authorized the management to follow up, evaluate and review work performance on a yearly basis.

6.2 CODE OF CONDUCT

The Code of Conduct is formulated by the Company to provide guidelines for desirable and proper behavior to which all executives and staff of the Company are required to have adhered in order to ensure the Company's business operations in line with the Company's vision and missions as well as pursuing the goal in development of quality of work and quality of life of staff. The Code of Conduct will be regularly reviewed or updated to rest assured that the guidelines for adherence have always embodied the professional integrity and high standards, by encompassing the following matters:

- Convincing, urging and motivating executives and staff to jointly create value to the businesses;
- Building up the confidence that the legal rights of the stakeholders are protected;
- Having honest, transparent and fair treatment towards the stakeholders, together with all related persons;
- Encouraging all executives and staff to have a responsibility to assume a familiarity with and comply with the Code of Conduct, together with relevant policies of the Company to be further formulated.

6.3 SIGNIFICANT CHANGES AND DEVELOPMENTS IN CORPORATE GOVERNMENT POLICIES, PRACTICES, AND SYSTEMS

The Corporate Governance and Risk Management Committee, which is responsible for supervising and monitoring the Company's compliance with the principles of the Corporate Governance Code while also promoting and supporting the Company's business operations to create sustainable business value, has stipulated that the appropriateness of compliance with the principles of the Corporate Governance Code be reviewed at least once a year, with the Board of Directors assigning the Corporate Governance and Risk Committee to consider and evaluate its implementation in order that the evaluation results is then proposed to the Board of Directors for consideration and monitoring to ensure the implementation of the Company's strategies. In the Board of Directors' meeting on a quarterly basis, the Board of Directors monitors the performance of the management and requiring that the performance and operating results of the Company be reported, especially in terms of financial goals and plans to pursue the established strategies. However, in 2021, the Company has important actions as follows:

6.3.1 THE COMPANY HAS ESTABLISHMENT OF THE PERSONAL DATA PROTECTION WORKING GROUP

According to the results of the review of compliance with applicable laws and with the priority given to personal data protection and to ensure that data protection operations achieve efficiency and conform to the law. The Company formulated the Company's guidelines for personal data protection by attaching importance to the right to privacy and personal data protection, including the safety of using personal information, and also established the Personal Data Protection Working Group, as follows:

1.	Mr. Alvin Gee	Deputy Managing Director: Administration	Chairman of the Working Group
2.	Mrs. Manatsavee Subchavaroj	Assistant Managing Director: Directors Office and Compliance Group	Member
3.	Mr. Pracha Udomchaiporn	Information Technology General Manager	Member
4.	Mr. Nattawut Kutan	Safety Management General Manager	Member
5.	Mr. Surasith Arunrattanakul	Legal and Compliance General Manager	Member and Secretary

To that end, the Company will further formulate a Personal Data Protection Policy and appoint a Personal Data Protection Officer (DPO) as required by law.

6.3.2 COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE 2017

The Company has complied with the Corporate Governance Code 2017 that issued by the SEC and applied to the suitability of the company's business.

In 2021, the Company has not been implemented and measures have been replaced or appropriate plans are in place as follows:

1. Determination of the number of terms of holding of office as independent director:

The Board of Directors does not specify the number of terms that an independent director of not exceeding nine years, because of the Board of Directors considers and deems that the appointment of independent directors to resume office as directors will be useful for the Company and shareholders since the directors consecutively holding such office will have better knowledge and experience in the Company's business operations and create more value for shareholders. In this regard, no independent director serves on the Board of Directors for more than nine years.

2. The Chairman of the Board of Directors should be an independent director

In 2020, The Chairman of the Board of Directors who was an independent director resigned from his position and Vice Chairman of the Board of Directors has continued to act as Chairman of the Board during the period of the Nomination Committee to appoint the Chairman. However, in 2021, the Vice Chairman of the Board of Directors has acted by emphasizing the benefits to the company, shareholders and stakeholders and all directors are able to express their opinions independently.

3. Determination of policy on the minimum number of quorums during the committee will vote at the board meeting. The number of directors must be staying at the meeting not less than two-thirds of the total number of directors. The Company shall be implemented such plans in 2022.

6.3.3 INFORMATION ON COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE TO ACHIEVE ASSESSMENT

The Company has regularly reviewed the corporate governance policy and practices every year in order to create sustainable business value. According to the previous operating results, the Company has adhered to and complied with the aforesaid Corporate Governance Code, and as a result, the Company received assessments and awards for the corporate governance in 2021, as follows:

- The Company received the "Excellent" rating in the assessment of the quality of the 2021 Annual Ordinary General Meeting of Shareholders (AGM Checklist 2021), from the Thai Investors Association;
- The Company was consecutively rated excellent (Excellent CG Scoring) or 5 stars by the Thai Institute of Directors Association (IOD) under the Corporate Governance Report of Thai Listed Companies 2021;
- The Company was selected as one of 146 listed companies on the "Thailand Sustainability Investment" 2021 for the fifth consecutive year in the services category, proving the listed company's good management, business operations by taking into account Environmental, Social and Governance, delivering efficient service, improving quality of life, building confidence for investors and stakeholders in the sustainable business operations amid the COVID-19 situation;
- The Company was presented with the "Good Level" National Green Office Award from the Green Office Promotion Project for 2020 of the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment;
- The Company was awarded the Thailand's Top Corporate Brand 2021 as a company with the highest brand value in the transportation and logistics sector in 2021, by the Faculty of Commerce and Accountancy Chulalongkorn University, at the ASEAN and Thailand's Top Corporate Brands 2021.



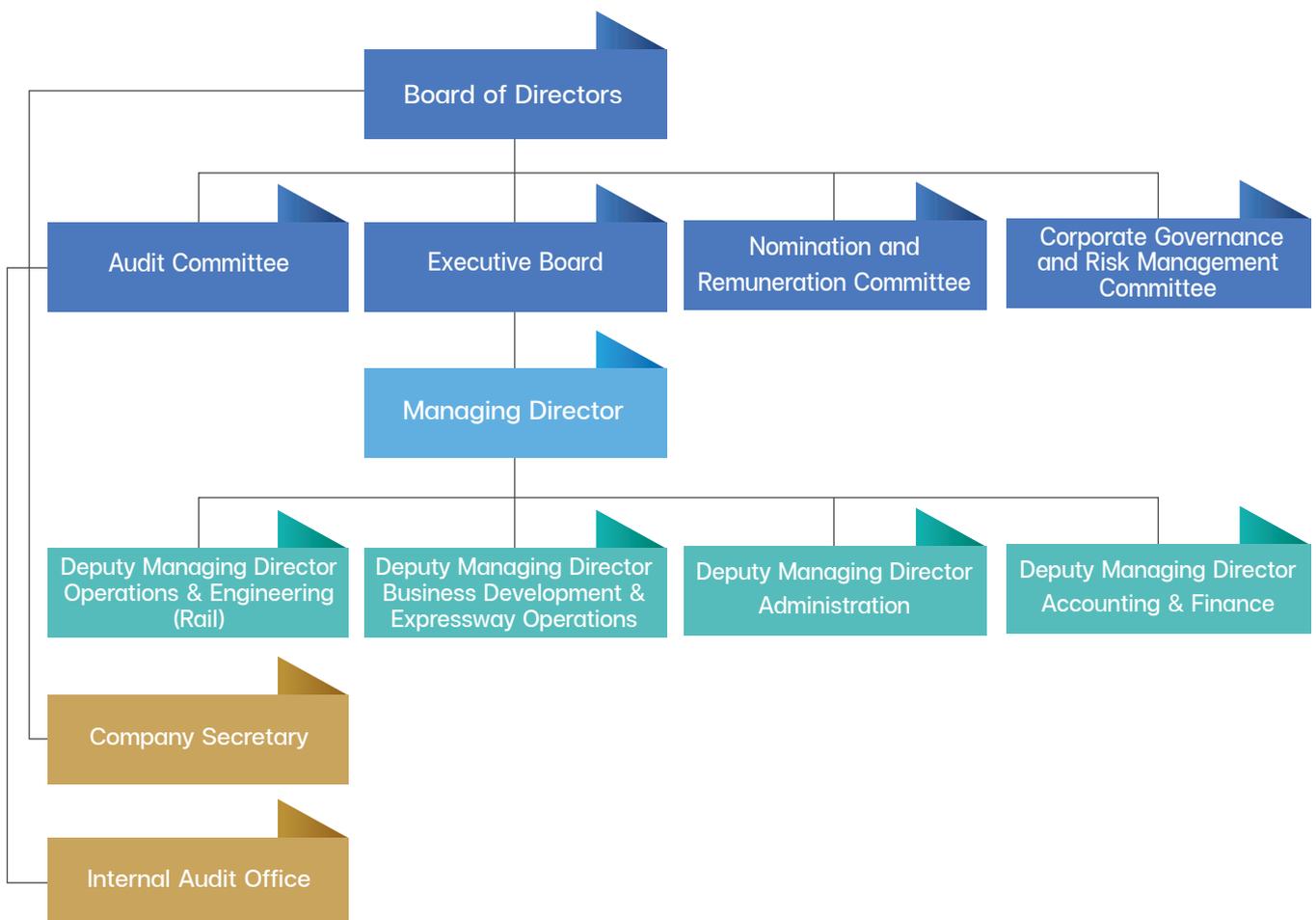
For more information, please see Attachment 5: The Company Policy and Guidelines on Corporate Governance and the Company Code of Conduct

7 CORPORATE GOVERNANCE STRUCTURE AND SIGNIFICANT INFORMATION RELATING TO THE BOARD OF DIRECTORS, SUBCOMMITTEES, EXECUTIVES, STAFF AND OTHERS

7.1 CORPORATE GOVERNANCE STRUCTURE

The Company has established and reviewed the Company's management structure by realizing the organizational leadership roles and responsibilities of the Board of Directors in achieving the sustainable value creation for the business. The Company has also assigned the Board of Directors to ensure that all directors and executives discharge their duties with duty of care and duty of loyalty and to ensure that the Company's operations have been carried out in compliance with applicable laws, articles of association and resolutions of the shareholders' meeting.

The Company's corporate governance structure comprises the Board of Directors and another four subcommittees as appointed to help supervise the Company's administration in various aspects, namely, the Audit Committee, the Executive Board, the Nomination and Remuneration Committee, and the Corporate Governance and Risk Management Committee, with the Managing Director serving as the top executive of the Management Team. The organizational structure as of January 1, 2022 is established as follows:

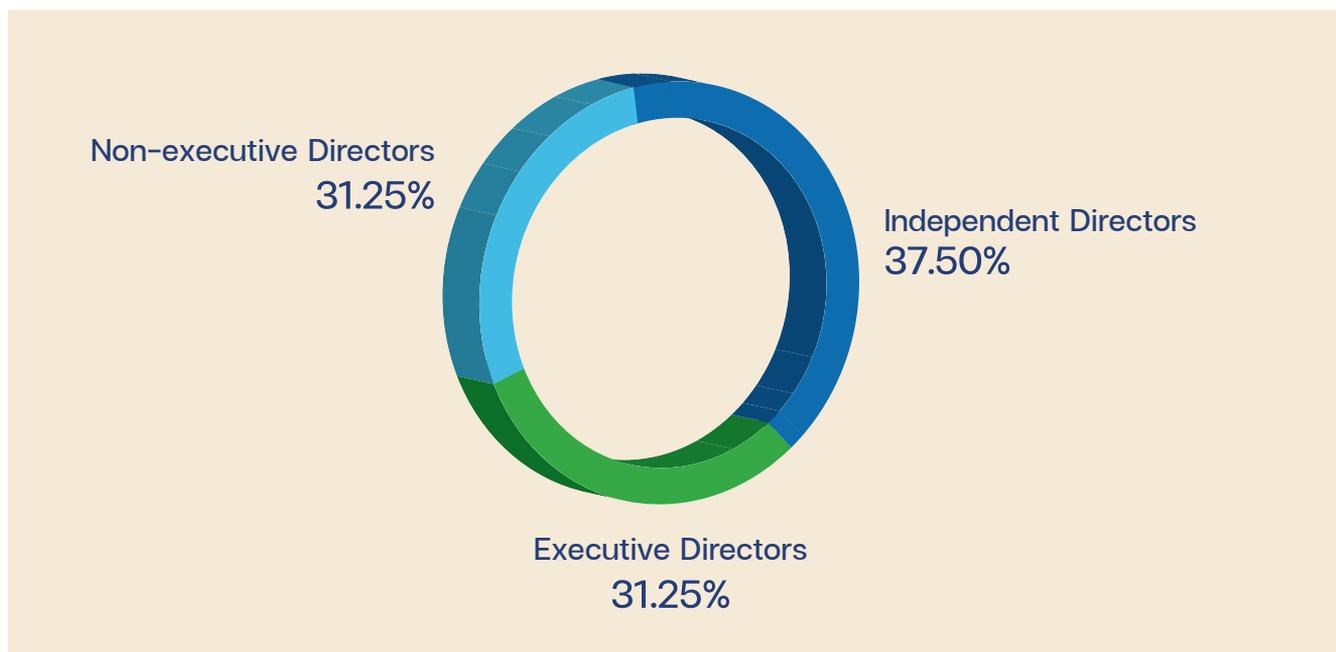


7.2 INFORMATION RELATING TO THE BOARD OF DIRECTORS

7.2.1 COMPOSITION OF THE BOARD OF DIRECTORS

The Company has taken into account scale, composition, proportion of independent directors, skill, experience, education, capability and character traits, together with gender and age as appropriate and necessary to lead the organization to meet the objectives and goals specified by the Company, with the composition of the Board of Directors as of December 31, 2021 consisting of:

- 16 directors, of which 6 are independent directors, representing one-third of the total number of independent directors, which is not less than 3 persons under the criteria established by the SEC Office, and 5 non-executive directors, with 3 directors having experience in the main businesses in which the Company has engaged, and 5 executive directors;
- The Chairman of the Board of Directors and the Managing Director is not the same person so as to separate between the policy making, supervisory duty and the regular managerial duty. The Board of Directors clearly determines powers and duties of the Chairman of the Board of Directors and the Managing Director. The Chairman of the Board of Directors is an independent director by the definition of the SET and has no relationship with management.



Skill Matrix

List of Directors	Gender	Business-Related Experience			Education and Experience				
	(Male / Female)	Expressway	Railway	Advertising Media/ Commercial Development	Engineering Knowledge	Finance and Accounting Knowledge	Economics Knowledge	Political Science / Law Knowledge	Business Administration Knowledge
1. Mr. Plew Trivisvavet	Male	•	•	•	•				•
2. Mr. Vitoon Tejatussanasoontor	Male					•			•
3. Gen. Chetta Thanajaro	Male							•	
4. Prof. (adjunct) Athapol Yaisawang	Male							•	•
5. Dr. Annop Tanlamai	Male				•	•			•
6. Mrs. Vallapa Assakul	Female					•	•		•
7. M.L. Prasobchai Kasemsant	Male	•			•				
8. Mr. Supong Chayutsahakij	Male	•	•	•	•				•
9. Mr. Phongsarit Tantisuvanitchkul	Male	•	•	•	•				
10. Mrs. Payao Marittanaporn	Female	•	•	•		•			•
11. Miss Arisara Dharamadhaj	Female					•	•		•
12. Mr. Panit Dunnvatanachit	Male					•	•		•
13. Mr. Vithaya Punmongkol	Male		•		•				
14. Mr. Piyakorn Apibalsri	Male		•			•	•		•
15. Mrs. Tasanuch Thammachot	Female	•				•		•	•
16. Dr. Sombat Kitjalaksana	Male	•	•	•	•				•
		7	7	5	7	8	4	3	12

7.2.2 INFORMATION RELATING TO THE BOARD OF DIRECTORS AND CONTROLLERS

The Board of Directors comprised 16 directors who were knowledgeable, competent and experienced in varied fields of business; whose names, as of December 31, 2021, were listed below:

List of Directors	Position	Category
1. Mr. Plew Trivisvavet	Acting Chairman of the Board of Directors Deputy Chairman of the Board of Directors Chairman of the Executive Board Nomination and Remuneration Committee Member	Executive Director
2. Mr. Vitoon Tejatussanasoontorn	Chairman of the Audit Committee Nomination and Remuneration Committee Member	Independent Director

List of Directors	Position	Category
3. Gen. Chetta Thanajaro	Chairman of the Nomination and Remuneration Committee Audit Committee Member	Independent Director
4. Dr. Annop Tanlamai	Audit Committee Member	Independent Director
5. Prof. (adjunct) Athapol Yaisawang ⁽¹⁾	Chairman of the Corporate Governance and Risk Management Committee Nomination and Remuneration Committee Member	Independent Director
6. Mrs. Vallapa Assakul ⁽²⁾	Corporate Governance and Risk Management Committee Member	Independent Director
7. M.L. Prasobchai Kasemsant	Director	Independent Director
8. Mr. Supong Chayutsahakij ⁽³⁾	Executive Director	Executive Director
9. Mr. Phongsarit Tantisuvanitchkul	Executive Director Corporate Governance and Risk Management Committee Member	Executive Director
10. Miss Arisara Dharamadhaj	Director	Non-executive Director
11. Mr. Panit Dunnvatanachit	Director	Non-executive Director
12. Mr. Vithaya Punmongkol	Director	Non-executive Director
13. Mr. Piyakorn Apibalsri ⁽⁴⁾	Director	Non-executive Director
14. Mrs. Tasanuch Thammachot ⁽⁵⁾	Director	Non-executive Director
15. Mrs. Payao Marittanaporn ⁽⁶⁾	Executive Director	Executive Director
16. Dr. Sombat Kitjalaksana	Executive Director Corporate Governance and Risk Management Committee Member Managing Director	Executive Director

Remarks: Directors' profiles appear in Attachment 1

⁽¹⁾ Prof. (adjunct) Athapol Yaisawang was appointed as director on October 27, 2021, and appointed as the Corporate Governance and Risk Management Committee Member and concurrently as the Chairman of Corporate Governance and Risk Management Committee, and as the Nomination and Remuneration Committee Member on December 15, 2021.

⁽²⁾ Mrs. Vallapa Assakul vacated from the position of Chairman of the Corporate Governance and Risk Management Committee on December 15, 2021.

⁽³⁾ Mr. Supong Chayutsahakij vacated from the position of Nomination and Remuneration Committee Member on December 15, 2021.

⁽⁴⁾ Mr. Piyakorn Apibalsri was appointed as director on October 27, 2021 to replace Mrs. Natamon Bunnak who resigned from the position as director on October 25, 2021.

⁽⁵⁾ Mrs. Tasanuch Thammachot was appointed as director on June 23, 2021 to replace Mr. Wichan Ekarintrakul who resigned from the position as director on February 14, 2020.

⁽⁶⁾ Mrs. Payao Marittanaporn vacated from the position of Corporate Governance and Risk Management Committee Member on December 15, 2021.



For more information, please see Attachment 1: Information of the Directors, Top Management, Accounting and Finance Executives, Chief Accountant and Company Secretary

Authorized Signatory Directors

The Company has determined five directors authorized to sign and bind the Company, comprising Mr. Plew Trivisavet, Mr. Supong Chayutsahakij, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana, and Mrs. Payao Marittanaporn, whereby two of these five directors shall jointly sign and affix the Company's seal.

7.2.3 INFORMATION RELATING TO ROLES AND DUTIES OF THE BOARD OF DIRECTORS

Roles, Duties and Responsibilities of the Company's Board of Directors

1. Monitoring and supervising the Company's operations to ensure compliance with laws, objectives and the Articles of Association, as well as resolutions of shareholders' meeting, and protecting the Company's interests based on the Corporate Governance Code, as well as complying with the rules and requirements stipulated by the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.
2. Establishing operational policies and directions of the Company, as well as supervising to ensure that management takes actions in compliance with the established policies with efficiency and effectiveness to contribute to economic value maximization for the business and the wealth maximization for shareholders.
3. Establishing vision, mission and goals and business strategies of the Company and subsidiaries. The Company has also reviewed and approved with the management.
4. Providing charter of the Committees and Subcommittees and also regularly review in accordance with the rules and regulations.
5. Providing complete, correct and sufficient reports on financial information, the Company's information and general information which are important for shareholders, and verifying information in the reports.
6. Introducing to the Company an internal control system, internal audit and risk management measures with effectiveness, as well as following up on such matters on a regular basis.
7. Establishing subcommittees to ensure the good corporate governance.
8. Considering clearly determining and separating roles, duties, and responsibilities among the Board of Directors, subcommittees and management, with regular communication regarding such roles, duties and responsibilities to the Board of Directors, subcommittees, management and staff of the Company.
9. Appointing any persons to engage in the Company's business under the supervision of the Board of Directors, or, if applicable, authorizing such persons to have power for a period of time as the Board of Directors deems appropriate, provided that the Board of Directors may revoke, repeal, amend or change such authorization as appropriate.

Roles, Duties and Responsibilities of the Chairman of the Board of Directors

1. Considering, together with the Managing Director, to determine the agenda for the Board of Directors' meeting, as well as ensuring that the Company's directors receive accurate, complete, clear, and timely information prior to the meeting in order that they can make appropriate decisions and set business goals with the management.
2. Presiding over the Board of Directors' meeting
 - 2.1 Conducting the Board of Directors' meeting in accordance with the agenda, the Articles of Association, and applicable laws.
 - 2.2 Allocating sufficient time and encouraging all of the Company's directors to discuss, share their opinions fully, independently, and exercise their own discretion deliberately, while taking into account all stakeholders.
 - 2.3 Scheduling the Board of Directors' meeting without presence of any directors from the management.
3. Presiding over the shareholders' meeting to ensure such meeting's proceedings in accordance with the agenda, the Articles of Association, and applicable laws, by allocating time appropriately, as well as providing shareholders with an equal opportunity to express their opinions and ensuring that shareholders' questions are properly and transparently answered.
4. Supporting and serving as a good role model in compliance with the principles of corporate governance and codes of conduct.
5. Strengthening good relationship between the Board of Directors and the management and supporting the performance of duties of the Managing Director and the management under the Company's policies.
6. Supervising and ensuring the information disclosure and management with transparency in the case of a conflict of interest.
7. Supervising and ensuring that the Board of Directors have an appropriate structure and composition.
8. Supervising and ensuring efficiency in the performance of the entire Board of Directors, subcommittees, and each director/member.

Roles, Duties and Responsibilities of the Managing Director

1. Controlling and managing main business of the Company including monitoring all activities of the Company to ensure compliance with resolutions and policies as assigned and suggested by the Board of Directors.
2. Conducting feasibility studies on new projects and having power to consider approving various projects as authorized by the Executive Board.

3. Authorizing the Company's staff in the executive positions, namely, Deputy Managing Director, Assistant Managing Director, General Manager or equivalent to perform duties on behalf of the Managing Director in certain matters (such as purchase order, procurement, payment order) as appropriate.
4. Appointing any Deputy Managing Directors or any other persons acting in place of the Managing Director from time to time in the event that the Managing Director are unable to perform their duties, whereby such acting persons shall have the same authority as the Managing Director.
5. Having power to appoint any persons or groups of persons to engage in the Company's business under the supervision of the Managing Director, or, if applicable, authorizing such persons to make arrangements as the Managing Director deem appropriate and having power to change, amend, revoke and repeal such authorization.

7.3 INFORMATION RELATING TO SUBCOMMITTEES

The Board of Directors has established four subcommittees, consisting of the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Risk Management Committee, and the Executive Board, with the respective subcommittees' charters available on the Company's website (www.bemplc.co.th).

1. AUDIT COMMITTEE

The Board of Directors appoints the Audit Committee to assist in supervising the Company's businesses. Mr. Vitoon Tejatussanasoontorn, an independent director who has knowledge in the field of accounting and finance, was appointed to hold office as Audit Committee Chairman, and the General Manager of the Internal Audit Office serves as secretary to the Audit Committee. As of December 31, 2021, the Audit Committee comprised three independent directors as listed below:

1. Mr. Vitoon Tejatussanasoontorn *	Audit Committee Chairman	(Independent Director)
2. Gen. Chetta Thanajaro	Audit Committee Member	(Independent Director)
3. Dr. Annop Tanlamai *	Audit Committee Member	(Independent Director)

Remark: * Served as audit committee members with knowledge in the field of accounting and finance

Roles, Duties and Responsibilities

1. Reviewing to ensure that the Company's financial reports are accurate and adequate.
2. Reviewing to ensure that the Company's internal control system and internal audit system are suitable and effective, considering the independence of the internal audit unit as well as granting approval on consideration for appointment, transfer, termination of employment of head of the internal audit unit or any other unit responsible for the internal audit.
3. Reviewing to ensure the Company's performance in compliance with the securities and exchange law, requirements of the SET and the laws relating to the Company's business.
4. Considering, selecting, submitting for appointment of a person who is independent to serve as the Company's auditor, and proposing remuneration and termination of employment of such person as well as meeting with the auditor without the executives at least once a year.
5. Considering connected transactions or transactions which may involve a conflict of interest in compliance with the laws and requirements of the SET in order to ensure that such transactions are justified and of the utmost benefit to the Company.
6. Preparing a report of the Audit Committee to be disclosed in the Company's Annual Report. Such report must be signed by the Audit Committee Chairman.
7. Supervising and monitoring the internal audit tasks by reviewing missions, scope of works, independence and development plan and providing internal audit personnel training to catch up with the business changes and develop themselves on a continual basis, in order to accommodate the direction of the Company's operations and international standards, including consideration and approval of annual internal audit plans.

8. Performing any other activities as assigned by the Board of Directors to independently provide opinions and suggestions in line with the requirements and the best practice guidelines for the audit committee of the SET.
9. In performing its duties, should the Audit Committee find or should there be any doubt as to whether or not the following transactions or actions may have a material impact on the Company's financial position and operational results, the Audit Committee will report on its findings to the Board of Directors in order to improve and rectify the same within the time as the Audit Committee deems appropriate:
 - (a) Any transactions giving rise to a conflict of interest;
 - (b) Corruption or unusual occurrence or material fault in the internal audit system;
 - (c) Violation of the securities and exchange law, requirements of the SET or laws related to the Company's business.

2. NOMINATION AND REMUNERATION COMMITTEE

The Board of Directors appoints the Nomination and Remuneration Committee to perform the duty to nominate and consider remuneration for directors and the Managing Director to ensure transparency and fairness, and General Chetta Thanajaro, an independent director, was appointed as Chairman of the Nomination and Remuneration Committee in accordance with the Corporate Governance Code which states that the chairman of each subcommittee should be an independent director. As of December 31, 2021, the Nomination and Remuneration Committee comprised four members as follows:

1. General Chetta Thanajaro	Nomination and Remuneration Committee Chairman	(Independent Director)
2. Mr. Vitoon Tejatussanasoontorn	Nomination and Remuneration Committee Member	(Independent Director)
3. Mr. Plew Trivisvavet	Nomination and Remuneration Committee Member	
4. Prof. (adjunct) Athapol Yaisawang *	Nomination and Remuneration Committee Member	(Independent Director)

Remark: * Prof. (adjunct) Athapol Yaisawang was appointed as the Nomination and Remuneration Committee Member to replace Mr. Supong Chayutsahakij on December 15, 2021.

Roles, Duties and Responsibilities

1. Considering criteria and procedures of nomination as well as selecting and proposing qualified persons to hold the position of the Company's directors to the Board of Directors so as to nominate them to the shareholders' meeting or proposing the nomination to the Board of Directors for consideration and appointment.
2. Considering selecting and proposing a qualified person to hold the position of the Managing Director to the Board of Directors for consideration and appointment.
3. Considering and determining criteria for consideration of remuneration of directors and the Managing Director.
4. Considering and determining remuneration of directors and proposing the same to the shareholders' meeting for consideration and approval.
5. Considering and reviewing salary rates and other remuneration for the Managing Director and proposing the same to the Board of Directors for consideration and approval.

3. CORPORATE GOVERNANCE AND RISK MANAGEMENT COMMITTEE

The Board of Directors appoints the Corporate Governance and Risk Management Committee to perform the duty to formulate policies and directions of operations in respect of the good corporate governance of the Company, including business ethics, and ensure to performance of duties with transparency and independence in compliance with the guidelines of the good corporate governance, consider risk management plan, risk management process, as well as monitor, inspect and review the Company's overall risks to stay at an appropriate level. To this effect, the Board of Directors appointed Prof. (adjunct) Athapol Yaisawang, an independent director, to hold the position as the Corporate Governance and Risk Management Committee Chairman. As of December 31, 2021, the Corporate Governance and Risk Management Committee comprised four members as follows:

1. Prof. (adjunct) Athapol Yaisawang *	Corporate Governance and Risk Management Committee Chairman	(Independent Director)
2. Mrs. Vallapa Assakul	Corporate Governance and Risk Management Committee Member	(Independent Director)
3. Mr. Phongsarit Tantisuvanitchkul	Corporate Governance and Risk Management Committee Member	
4. Dr. Sombat Kitjalaksana	Corporate Governance and Risk Management Committee Member	

Remark: * Prof. (adjunct) Athapol Yaisawang was appointed as the Corporate Governance and Risk Management Committee Member to replace Mrs. Payao Marittanaporn, and concurrently as the Corporate Governance and Risk Management Committee Chairman in place of Mrs. Vallapa Assakul on December 15, 2021.

Roles, Duties and Responsibilities

1. Studying and following up movement, tendency and performance in respect of the good corporate governance for submission to the Board of Directors for consideration as appropriateness for adoption as guidelines for the Company's operations.
2. Improving and proposing the good corporate governance policy of the Company, including business ethics, to the Board of Directors.
3. Following up and evaluating the results under the good corporate governance principles of the Company as well as reporting the same to the Board of Directors.
4. Considering policies and work plans relating to risk management for submission to the Board of Directors for consideration.
5. Monitoring and reviewing overall risk management of the Company, strategies for risk management and alert system of all kinds of risks in order to deal with risks to stay at an acceptable level to ensure compliance with the risk management policy of the Company.
6. Reporting on risks and operations for minimizing risks to the Board of Directors.

4. EXECUTIVE BOARD

The Board of Directors appoints the Executive Board to assist in providing advice and suggestions to the executives and make other arrangements as assigned by the Board of Directors. As of December 31, 2021, the Executive Board comprised five directors as listed below:

1. Mr. Plew Trivisvavet	Chairman of the Executive Board
2. Mr. Supong Chayutsahakij	Executive Director
3. Mr. Phongsarit Tantisuvanitchkul	Executive Director
4. Dr. Sombat Kitjalaksana	Executive Director
5. Mrs. Payao Marittanaporn	Executive Director

Roles, Duties and Responsibilities

1. Delivering guidelines for policy, supervising, providing suggestions and advice for the Managing Director and the executives.
2. Setting up a business plan, budget and managerial authority of the Company as assigned by the Board of Directors.
3. Inspecting, following up to ensure compliance with the Company's policies and plans with efficiency.
4. Conducting feasibility studies on investment in new projects for business expansion and prospects.
5. Having power to approve any juristic act binding upon the Company in an amount not exceeding Baht 500 Million per transaction, excluding those transactions giving rise to a conflict or interest with the Company or its subsidiaries under the notifications of the Securities and Exchange Commission, including such transactions requiring approval from shareholders under the regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand.
6. Having power to approve, appoint, remove, and determine salary and other remunerations, including expenses and facilities of the Company's officers or staff in the position of General Manager or higher, but not including the Managing Director.

7. The Executive Board or the Chairman of the Executive Board has the power to convene the Executive Board's meetings and/or determine rules and regulations of the meetings as it deems appropriate.
8. Reporting on the Company's operational results to the Board of Directors.

Table of Approval Authority

Persons with Approval Authority	Details
Board of Directors	Having the approval authority in accordance with the objectives and the Articles of Association of the Company, exclusive of execution of any transactions which give rise to a conflict of interest or interest, including transactions which require the shareholders' approval in accordance with the regulations of the SEC Office and the SET.
Executive Board	The amount limit not exceeding Baht 500 Million per juristic act, exclusive of transactions which require the shareholders' approval in accordance with the regulations of the SEC Office and the SET.
Managing Director	The amount limit not exceeding Baht 5 Million per juristic act.

7.4 INFORMATION RELATING TO THE MANAGEMENT

7.4.1 LIST OF NAMES OF THE MANAGEMENT

(1) Management Structural Chart

The Company's management structural chart is shown in Item 7.1: Corporate Governance Structure.

(2) List of Names of the Management

The Management Team under the structure as at January 1, 2022, comprised five persons, who are executives by the definition of "executive" required by the SEC Office (their profiles appear in Attachment 1) as listed below:

Name	Position
1. Dr. Sombat Kitjalaksana	Managing Director
2. Mr. Witoon Hatairatana	Deputy Managing Director Operations & Engineering (Rail)
3. Mr. Anawash Suwanarit	Deputy Managing Director Business Development & Expressway Operations
4. Mr. Alvin Gee	Deputy Managing Director Administration
5. Miss Panan Tosuwanthaworn	Deputy Managing Director Accounting & Finance

Remarks:

1. Dr. Vites Techangam, Deputy Managing Director: Technology and E-Business, retired on December 31, 2021.
2. Mr. Sanguan Kunatinun, Deputy Managing Director: Engineering, retired on December 31, 2021.
3. Mrs. Sudruthai Prommart, Deputy Managing Director: Operations, resigned, with effect on November 1, 2021.
4. Mr. Phakpoom Thaweewittayarut, Deputy Managing Director: Administration, resigned to perform duty in another company within the Company Group, with effect on November 1, 2021.



For more information, please see Attachment 1: Information of the Directors, Top Management, Accounting and Finance Executives, Chief Accountant and Company Secretary

7.4.2 POLICY ON REMUNERATION FOR EXECUTIVES

Remuneration for executives, excluding the Managing Director, shall be considered in accordance with the criteria and policy specified by the Executive Board, corresponding to the Company's operational results and each executive's performance evaluation results through the Performance Management System (PMS).

In 2021, the Company paid remuneration for executives as follows:

(1) Monetary Remuneration

The remuneration for executives in 2021 paid by the Company consisted of salary and bonus to nine executives, totaling Baht 61.76 Million, compared to the monetary remuneration payment over the past three years, per details as follows:

Remuneration	2019	2020	2021
Number of Executives (Persons)	10	10	9
Total Remuneration (Baht)	120,223,847.00	103,258,280.70	61,759,692.00

(2) Other Remuneration

The Company has established a provident fund, which provides executives with long-term remuneration upon termination of employment with the Company or upon retirement, whereby executives pay savings at the rate of 5-10 percent of their respective salaries according to service years and the Company pays contributions at the same rate to the fund. In 2021, the Company paid contributions to the provident fund for nine executives as Managing Director and Deputy Managing Directors in the total amount of Baht 3,379,437. The contribution rates paid by the Company are in accordance with the resolution of the Board of Directors' meeting.

7.4.3 AMOUNT OF REMUNERATION FOR EXECUTIVES

1. Monetary remuneration for executives

In 2021, the Company paid remuneration, comprising salary and bonus for its nine executives at the levels of Managing Director downwards to Deputy Managing Director, in the total amount of Baht 61,759,692.

2. Other remuneration of executives

The Company has established a provident fund, which provides executives with long-term remuneration upon termination of employment with the Company or upon retirement, whereby executives pay savings at the rate of 5-10 percent of their respective salaries according to service years and the Company pays contributions at the same rate to the fund. In 2021, the Company paid contributions to the provident fund for 9 executives as Managing Director and Deputy Managing Directors in the total amount of Baht 3,379,437.

In this regard, the contribution rates paid by the Company in accordance with the resolution of the Board of Directors' meeting are considered mainly depending on the Company's performance and operational results.

7.5 INFORMATION RELATING TO STAFF

7.5.1 NUMBER OF STAFF

As of December 31, 2021, there were a total of 3,876 staff, comprising staff in main and supporting functions, divided into the following business groups:

Business Groups	Main Function (persons)	(%)	Supporting Function (persons)	(%)	Total (persons)
Expressway business	806	79.33%	210	20.67%	1,016
Metro business	2,505	87.59%	355	12.41%	2,860
Total	3,311	85.42%	565	14.58%	3,876

Number of Subsidiaries

- NECL has no employment of executive and permanent staff but operates the Udon Rattaya Expressway by means of a service agreement with BEM.
- BMN had a total of 202 staff in each work unit (excluding executives), comprising Sale and Marketing Department, Business Development Department, Finance Department, and Operation Department.

Over the past three years, the number of the Company's staff has not changed significantly and there has been no labor dispute.

7.5.2 REMUNERATION FOR STAFF

In order to determine the appropriate and competitive remuneration to maintain the good and competent staff to work with the organization, the Company then participates in the survey of wages and remuneration to compare with labor market and other companies in the same sector as well as reviewing the starting salary for new graduates and base salary based on the value of work via the institute conducting wage survey on a regular basis. Therefore, it can be assured that the Company determines the fair and appropriate remuneration to the staff.

The Executive Board considers adjusting wages on a yearly basis by taking into account the Company's operational results through the Competency KPIs and its payment coverage ratio.

Furthermore, the Company establishes a provident fund for long-term care of staff in order to motivate staff to work with the Company and to encourage staff's saving habits to secure adequate retirement savings for a quality retirement life. Staff may apply for provident fund membership, whereby staff pay savings at the rate of 5 to 15 percent of his/her salary according to his/her ability to save and the Company pays contributions at the rate of 5 to 10 percent according to such staff's service years and requirements of the fund. Staff who are fund members shall gain benefits arising from management in proportion to each staff's savings in the fund. The Company also provides group life insurance benefits for staff so as to secure staff and staff's family.

Number of Staff and Remuneration Divided into Business Groups

In 2021, the Company paid remuneration for its staff in the total amount of Baht 1,751 Million, comprising salaries, overtime pay, bonuses, social security contributions, and provident fund contributions, etc.

The aforesaid details in 2019-2021 are given below:

Business Groups	2019	2020	2021
Expressway business (Persons)	1,023	1,041	1,016
Metro business (Persons)	3,041	2,996	2,860
Total (Persons)	4,064	4,037	3,876
Total staff remuneration (Baht)	2,032,585,731.63	1,891,074,686.37	1,751,894,402.93

Number of Staff Participating in Provident Fund - PVD

Business Groups	Having PVD (Yes/No)	Number of Staff Participating in PVD (persons)	Proportion of Staff Participating in PVD/Total Staff (%)
Expressway business	Yes	1,027	100.00
Metro business	Yes	2,331	81.11

7.6 OTHER SIGNIFICANT INFORMATION

7.6.1 PERSONS ASSIGNED TO PERFORM DUTIES IN VARIOUS ASPECTS

◦ Company Secretary and Head of Compliance Unit

The Board of Directors' Meeting No. 5/2021, held on October 27, 2021, resolved to appoint Mrs. Manatsavee Subchavaroj, Assistant Managing Director: Managing Director Office and Compliance Unit, who has suitable qualifications, great knowledge and understanding of rules and regulations applicable to listed companies, to hold the position as Company Secretary (details of her profile appear in Attachment 1), Concurrently,

Mrs. Manatsavee Subchavaroj holds another position as Head of Compliance Unit (details of her profile appear in Attachment 3). The duties and responsibilities assigned to the Company Secretary are as follows:

1. Providing suggestions to directors relating to provisions of laws, relevant rules and regulations.
2. Arranging for orientation and providing necessary information for the performance of duties to the current and new directors.
3. Monitoring the Company to ensure its compliance with laws, Articles of Association, relevant regulations and the good corporate governance principles.
4. Convening meetings as stipulated by laws and Articles of Association, preparing and keeping minutes of meetings, as well as coordinating to ensure efficient performance in compliance with resolutions passed by the Board of Directors or the shareholders' meetings.
 - Preparing and keeping the following documents:
 - Directors' register;
 - Notices, minutes of the Board of Directors' meetings and annual reports of the Company;
 - Notices and minutes of the shareholders' meetings.
5. Keeping reports on interest filed by directors or executives.
6. Monitoring to ensure disclosure of information and information memorandum to regulatory units in compliance with relevant laws, rules, and regulations.
7. Contacting and communicating with shareholders and relevant regulatory units, whereby shareholders may inquire or request any information as needed by contacting at Tel. 0 2641 4611 or sending questions via email to companysecretary@bemplc.co.th.
8. Promoting the provision of various training courses and providing useful information for the performance of duties of new directors.
9. Making other arrangements as announced by the Capital Market Supervisory Board.
10. Proceeding with other matters as assigned by the Board of Directors.



For more information, please see Attachment 1: Information of the Directors, Top Management, Accounting and Finance Executives, Chief Accountant and Company Secretary and Attachment 3: Information of Head of Internal Audit and Head of Compliance Unit of the Company

◦ The Person Taking the Highest Responsibility in Finance and Accounting

The Executive Board has appointed Miss Panan Tosuwanthaworn, who has knowledge and abilities in the fields of accounting and finance, to serve as the Deputy Managing Director: Accounting and Finance, holding the position of top management in accounting and finance (details of her profile appear in Attachment 1) with her duties and responsibilities as follows:

1. Planning financial strategies to encourage internal and external growth as well as financing to accommodate growth linking with the Company's growth strategies and business value.
2. Controlling and managing infrastructure in terms of financial information and financial management of the Company to ensure that the Company's work operations are driven to achieve tasks and goals as planned.
3. Developing and managing financial tools to contribute to the analysis of the efficiency of work operations and analysis of business value.
4. Communicating the organization's significant financial information to enhance the understanding and trust of investors relating to stability and opportunities of the Company.

In 2021, Miss Panan Tosuwanthaworn, the Deputy Managing Director: Accounting and Finance, received training in the courses of the discounted cash flow projection to consider asset impairment under TAS 36 Impairment of Assets after the end of the relaxation measures organized by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King, and the TLCA CFO Professional Development Program (TLCA CFO CPD) on three occasions, namely, No. 4/2021 “How finance leaders are adapting within the new normal”, No. 6/2021 “ESG Integration in Sustainable Investing”, and No. 9/2021 “ESG related Financial Innovation” organized by Thai Listed Companies Association, totaling 8 hours.



For more information, please see Attachment 1: Information of the Directors, Top Management, Accounting and Finance Executives, Chief Accountant and Company Secretary

o The Person Supervising Accounting

The Company has appointed an executive officer, namely, Miss Saranya Lertjiraprasert, who has knowledge and understanding of the accounting system of the Company, to hold the position of General Manager of Accounting Division, as the person supervising accounting (details of her profile appear in Attachment 1), with her duties and responsibilities as follows:

1. Drawing up accounting and finance policies and planning as well as determining the accounting and financial systems in line with the guidelines for the Company’s work operations.
2. Overseeing preparation of accounts and inspecting close of accounts of the Company in each period to ensure that they are made properly and in accordance with the specified practices.
3. Overseeing and inspecting preparation of financial statements, balance sheet, income statement, and accounting reports.
4. Overseeing and inspecting income-expenditure of the Company.
5. Overseeing the Company’s budgeting and inspecting to ensure that the budget is utilized properly and in accordance with the budget plan as specified.
6. Overseeing the preparation of relevant tax reports for submission to relevant government authorities.

In 2021, Miss Saranya Lertjiraprasert, the General Manager of Accounting Division, received training in the course of Summary of TFRS Changes and Main Points (Revised 2021), organized by the Federation of Accounting Professions under the Royal Patronage of His Majesty the King, for six hours.



For more information, please see Attachment 1: Information of the Directors, Top Management, Accounting and Finance Executives, Chief Accountant and Company Secretary

o Person Holding the Position of Head of Internal Audit Unit

The Company has appointed an executive officer, namely, Miss Orathai Ruangamporn* as General Manager of the Internal Audit Office. The Audit Committee is of the opinion that she has knowledge, abilities and work experience suitable and sufficient to effectively perform her duties as Head of Internal Audit Unit. In this regard, an appointment, removal and transfer of a person holding the position of Head of Internal Audit Unit is subject to approval of the Audit Committee (details appear in Attachment 3).

Remark: * Miss Orathai Ruangamporn was appointed to hold the position of General Manager of the Internal Audit Office in place of Mrs. Vassana Wattananukulchai on January 1, 2022.



For more information, please see Attachment 3: Information of Head of Internal Audit and Head of Compliance Unit of the Company

7.6.2 LIST OF HEAD OF INVESTOR RELATIONS UNIT

The Company has established the Investor Relations Unit to represent the Company in communicating useful information to shareholders, analysts and investors, by assigning Mr. Tanavat Vanadit, Senior Investor Relations Manager, to communicate and provide information to build a good understanding and reliability as well as to strengthen relationships and supervise the team in order to ensure that they have accurate communication in the same direction, with the following duties and responsibilities:

- Representing the Company in communicating and providing information to create a good understanding for investors including local and international institutions, and general retail investors, both the money market (debentures) and the capital market (equity shares), to build credibility for the Company as well as building good relationships with investors and stakeholders;
- Building a good relationship and understanding with analysts/investors/shareholders, while taking care of the team to ensure their accurate communication in the same direction.

In 2021, the Company organized the Analyst Meetings, Conference Calls, Press Conferences and Press Interviews in an online format to suit the situation of the COVID-19 outbreak, with the Investor Relations Department holding 32 offline meetings with various institutions both at home and abroad, as well as holding 3 analyst meetings.

The foregoing activities were undertaken to provide appropriate clarification on the operational results and progress of the investment projects in order for the management to answer questions to investors equally and fairly in order for investors to be well-informed, as well as to provide material and necessary information for making investment decisions to the general public, including investors and institutional analysts.

The Company has also published BEM Magazine to disseminate its business information and other useful information, which has been regularly delivered to all shareholders and debenture holders of the Company. In addition, the Company conducted a survey of the opinions and needs of analysts and investors on the quality of communications and Investor Relations activities in 2021 (BEM IR SURVEY) to further improve the performance, with the survey results revealing that the percentage of satisfaction with the Investor Relations services was 91.02 percent.

Any persons having an interest in investment can contact the Investor Relations Department for more information at Tel. 0 2641 4611, or can call to schedule a conference call, or subscribe to the Company's mailing list via the Company's website, or ask any questions, or email at ir@bemplc.co.th.

7.6.3 REMUNERATION FOR AUDITOR

The Audit Committee and the Management Team jointly consider the qualifications of the auditor in respect of his/her reliability, independence, knowledge and experience in audit services, advice on accounting standards, timely certification of the financial statements, and appropriate remuneration, and then propose this matter to the Board of Directors to further propose to the annual ordinary general meeting of shareholders to consider approving the appointment of auditor. The proposed auditor shall neither have relationship nor interest with the Company or its subsidiaries, executives, major shareholders, or their related persons.

Remuneration for auditor is divided into two categories, namely:

(1) Audit fee

The Company paid the audit fees for 2021 in the amount of Baht 4,240,000 to EY Office Limited. When compared to the average audit fees of other listed companies in the same sector, the Company's audit fee was reasonable.

The Company's subsidiaries, namely, Northern Bangkok Expressway Company Limited and Bangkok Metro Networks Limited, paid the audit fees for 2021 amounting to Baht 990,000 and Baht 1,270,000, respectively.

(2) Non-audit fee

In 2021, the Company and its subsidiaries used other services from EY Office Limited, incurring the non-audit fee in the amount of Baht 800,000, for an audit of the Company's financial statements for the MRT Blue Line Extension Project, with such fee representing remuneration to be payable in the future as a result of the pending services.

8 REPORT ON KEY CORPORATE GOVERNANCE PERFORMANCE

8.1 SUMMARY OF PERFORMANCE OF THE BOARD OF DIRECTORS

The Board of Directors realizes its responsibilities and roles in policy formulation and supervision to ensure the Company's good management, covering its business objectives, goals, strategies, operating policies, important and adequate resource allocation to achieve the business objectives and goals, as well as monitoring, evaluating and ensuring the reporting of operational results in consistency with laws, the Articles of Association, together with resolutions of the shareholders' meeting, in pursuit of sustainability in the operations and value creation of the businesses.

In 2021, the Board of Directors played a key role in formulating policies, strategies and business plans to be in line with the Company's missions and ensure the business sustainability as follows:

- Considering and reviewing the corporate governance policy and practices regarding securities trading by stipulating measures to prevent the use of inside information by directors, executives and those who have perceived the information, whereby the trading of the Company's securities is prohibited for the period of 1 month prior to the disclosure of the financial statements and/or prior to the disclosure of such information to the public, and additionally assessing the performance of the Board of Directors on an individual basis.
- Considering a review of the internal control system and risk management, including the information security of the automatic fare collection system.
- Considering a formulation of the measures to prevent and deal with the spread of COVID-19 for operations, personnel work, in accordance with government announcements, as well as considering the financial impact.
- Considering an issuance of the Sustainability Bond which was secured that consistent with the operation by the MRT Blue Line Project, a clean transportation. It is a public transportation system which is an infrastructure to help reduce the carbon dioxide emissions caused by traveling by oil-fueled vehicles and help people to have easy access. As for the potential benefits to be obtained by the Company it not only involves a good rate of interest and additional diversified investors, but also attraction of investors with environmental concerns.

8.1.1 NOMINATION, DEVELOPMENT AND ASSESSMENT OF PERFORMANCE OF THE BOARD OF DIRECTORS

(1) Nomination of Independent Directors

The Company establishes the structure of the Board of Directors which shall be composed of independent directors of at least one-third of all directors, but no fewer than three persons, whereby such independent directors can provide their opinions independently and perform the duty to safeguard benefits of the Company and shareholders at their best.

The Nomination and Remuneration Committee will nominate directors by considering directors' qualifications and prohibited characteristics under the Public Limited Companies Act, Securities and Exchange Act, including relevant notifications. In addition, the Board of Directors will consider the selection of skilled, experienced independent directors which are beneficial to the Company, under the qualifications of independent director which have been publicized on the Company's website (www.bemplc.co.th).

Thereafter, they will be then nominated to the Board of Directors and/or the shareholders' meeting to consider the appointment as the Company's independent directors.

In 2021, the Company had 6 independent directors, in which the Board of Directors had appointed 1 independent director, namely, Prof. (adjunct) Athapol Yaisawang, with experience in law which would be instrumental in supporting the Company's business operations and the Company's compliance with laws.

(2) Nomination of Directors

Director Nomination Criteria and Methods

The Nomination and Remuneration Committee comprising of three independent directors out of a total of four members of the Nomination and Remuneration Committee considers nominating persons to be appointed as directors to replace those directors who vacate office, both resignations prior to the end of term and retirement by rotation, in accordance with the following criteria:

1. Having qualifications in compliance with the Public Limited Companies Act, the Securities and Exchange Act, rules of the SEC Office and rules of the SET.
2. Having knowledge, ability, and experience in a variety of fields which will be beneficial and add value to the Company.
3. Having characteristics supporting and promoting the corporate governance to create value to the Company, such as independence, willingness to share opinions, initiative, and performance of duties with responsibility, due care, integrity, and full-time contribution, etc.
4. In case of a director who retires by rotation, the Nomination and Remuneration Committee considers from his past records whether he performed duties as a director with due care, integrity, and full-time contribution.
5. In the nomination of directors, there should be consideration of the required qualifications taking into account the necessary skills for the Board and qualifications in line with the Company's business strategies.
6. In case such vacancy is a director representing EXAT or MRTA under the conditions of the relevant Concession Agreements, the replacement director must be nominated by the said authority to fill the vacancy by The Nomination and Remuneration Committee shall be considers the qualifications to determine whether they are appropriate or not.

The Nomination and Remuneration Committee shall nominate such qualified persons to the Board of Directors and/or shareholders' meeting for appointment as the Company's directors, with the criteria and procedures for appointment of directors complying with the Articles of Association.

Pursuant to the Articles of Association, at every annual general meeting, one-third of the number of directors must vacate their offices. If the number of directors is not a multiple of three, then the number nearest to one-third must retire from office. Therefore, the directors have a term of three years, and a retiring director may be re-elected. In this regard, the Company does not fix the number of terms of holding office as a director or the number of other listed companies in which the directors will hold office as directors but considers the suitability of appointment of directors who are due to retire by rotation to resume office.

In 2021, the 2021 Annual Ordinary General Meeting of Shareholders held on April 28, 2021 resolved to approve the re-appointment of five existing directors, namely, Dr. Annop Tanlamai, Mr. Panit Dunnvatanachit, Mrs. Natamon Bunnak, Mrs. Vallapa Assakul, and M.L. Prasobchai Kasemsant, to resume their position for another term by voting for directors' election the Company entitles Shareholders to use the ballots to elect individual directors. By enabling Shareholders to vote to select the nominee as directors one by one.

Furthermore, the Board of Directors also decided to appoint three director to replace the vacant position during the acting period, namely, Prof. (adjunct) Athapol Yaisawang, Mr. Piyakorn Apibalsri, Mrs. Tasanuch Thammachot by following the prescribed procedures.

(3) Nomination of Top Management

The Managing Director, top management, shall be appointed by the Board of Directors, as nominated by the Nomination and Remuneration Committee, which shall consider nominating qualified persons, namely, those who have knowledge and capacities and experience which are useful for management to achieve objectives or targets as determined by the Board of Directors and have a good understanding of the Company's businesses. The Nomination and Remuneration Committee shall nominate the candidates to the Board of Directors to consider the appointment. In this regard, the main duty assigned by the Board of Directors to the Managing Director is the Company's administration under the power and authority specified in the Board of Directors' Charter and its subcommittees' charters on the caption of Nomination of Managing Director and Top Management.

(4) Development of Directors and Executives

The Board of Directors has a policy to support and facilitate training and learning for its directors and executives to ensure their continued improvement and performance, involving both internal and external training courses. All directors must attend training for an understanding of the performance of their duties in their capacity as directors.

The Company's Board of Directors and high level executives realize the significance of their participation in training or seminars in various courses or development of their knowledge and skills. The Board of Directors has attended training courses organized by the Thai Institute of Directors Association (IOD), namely, Director Certification Program (DCP), Director Accreditation Program (DAP), Board Performance Evaluation, The Role of Chairman (RCP), Audit Committee Program, Role of Compensation Committee (RCC).

In 2021, one of the Company's directors, namely, Mrs. Tasanuch Thammachot, received training on the Director Accreditation Program (DAP 186/2021).

(5) Board Self-Assessment

The Board of Directors has a policy to ensure the overall self-assessment of the entire Board of Directors and the self-assessment of the Board of Directors and subcommittees on an individual basis at least once a year, including assessment of the performance of compliance with the Company's code of business ethics. In addition, the Managing Director's performance must be assessed by the Board of Directors every year in accordance with the rules as specified by the Nomination and Remuneration Committee. Furthermore, the Board of Directors requires to review topics of assessment to ensure appropriateness and conformity to roles, duties, responsibilities, and corporate governance practices. This is to ensure that the assessment results will be proposed to the Board of Directors to consider improving performance.

Results of Board / Subcommittee Self-Assessment

In 2021, the results of the assessment of the overall performance of the Board of Directors and subcommittees as a whole and the self-assessment of individual directors/members, can be summarized as follows:

- 1) Structure and Qualifications of the Board of Directors / Subcommittees: the results of assessment are satisfactory, suitable for the Company's business nature, with the Board of Directors comprising personnel with sufficient knowledge and experiences in a variety of fields and performed their overall duties efficiently.

Moreover, the Board of Directors has appointed subcommittees to perform their duties to help supervise, monitor the businesses, nominate qualified personnel as director with transparency, fairness, independence from any person's influence, including determination of reasonable and competitive remuneration to retain quality and competent directors, draw up operational policies and direction in respect of good corporate governance of the Company, code of business ethics, together with risk management, as well as taking care of and providing suggestions to the management, for the benefit of the Company's business operations based on good corporate governance.

- 2) Role, Duties, and Responsibilities of the Board of Directors / Subcommittees:

The Board of Directors and subcommittees have completely fulfilled their duties under the scope of responsibilities and assignments, by giving priority to and contributing sufficient time for consideration of significant matters relating to the direction of the Company's business operations, review of the Company's corporate governance policy, ensuring no conflict of interest arises, with the Board of Directors regularly reviewing the internal control system as well as following up and monitoring the management's performance to ensure compliance with the policies assigned by the Board of Directors, monitoring and ensuring preparation of financial statements in accordance with generally accepted accounting standards, considering nominating qualified persons to the position as the Company's directors, considering policies and action plans relating to risk management, monitoring and reviewing the Company's overall risk management, risk management strategies and risk prevention systems of all kinds, establishing policy guidance, supervising, giving recommendations, advice to the Managing Director and the Management Team, identifying business plans, budget, inspecting, following up implementation of various policies and action plans of the Company to ensure efficiency.

- 3) The Board of Directors' / Subcommittees' Meetings: The results of assessment are satisfactory, namely that directors/subcommittee members are given prior notice of the annual schedule' meetings so as to enable them to manage time to attend every meeting; the number of the meetings and agenda are suitable to support the performance of its duties efficiently and to supervise and monitor the Company's business operations successfully; directors/subcommittee members are also given supporting documents prior to each meeting and sufficient time to read such information in preparation for each meeting; the supporting documents contain sufficient information for their decision making; the Board of Directors/subcommittees can request any other necessary information in support of their decisions for the benefit to the Company; the atmosphere at each meeting allows all directors/subcommittee members to express constructive opinions without undue influence of any person; and directors/subcommittee members can fully discuss significant issues at each meeting.
- 4) Directors' / Subcommittee Members' Performance of Duties: The results of assessment are satisfactory, namely that directors/subcommittee members are well prepared and sufficiently study information prior to each meeting; have regularly attended the meetings; independently provide their opinions and impartially consider various matters and are independent in making decisions and passing resolutions; provide useful suggestions for the Company's operations, and understand the significance of each matter and properly contribute their time to consider such matters without wasting time on minor issues; and accept different opinions among them without conflict.
- 5) Relationship with Management: The results of assessment are satisfactory, namely that directors/subcommittee members may straightforwardly discuss with the Managing Directors; maintain a good relationship with management; the Managing Directors can request directors'/subcommittee members' advice as necessary; the Board/subcommittees do not intervene with management's performance of duties; and the Board/subcommittees participate in solving problems as appropriate in case management's performance does not meet the specified plans and budget.
- 6) Self-Development of Directors/Subcommittee Members and Executives: The results of assessment are satisfactory, namely that directors/subcommittee members understand their roles, duties, and responsibilities; directors/subcommittee members have sufficient knowledge and understanding relating to the Company's businesses; have paid attention to significant information or news relating to economic and industrial conditions, changes in rules and regulations and the status of competition, which allows them to efficiently perform their duties; all directors/subcommittee members undergo training to ensure their understanding of the performance of duties in their capacity as directors/subcommittee members; and in case of newly-appointed directors/subcommittee members, the Board monitors to ensure management provides documents or briefings for the new directors/ subcommittee members to understand the businesses and ensure performance of duties as directors/subcommittee members; and a succession plan has been set out to ensure continued performance of duties as high level management of the Company.

(6) Assessment of Performance of Compliance with the Company's Code of Business Ethics

The Board of Directors sets out the Company's code of business ethics as principles and goals of the Company's business operations, and guidelines for performance of all directors, executives, and staff, per details available on the Company's website (www.bemplc.co.th). Directors, executives, and staff will regularly assess their performance of compliance with the Company's code of business ethics every year. In this regard, the overall assessment results of directors and executives can be summarized that they have completely complied with the Company's code of business ethics representing 97.69 percent.

(7) Assessment of Performance of the Managing Director

All directors of the Company, except the Managing Director, will constantly assess the performance of the Managing Director on a yearly basis in accordance with the criteria specified by the Nomination and Remuneration Committee. The Nomination and Remuneration Committee is assigned by the Board of Directors to propose remuneration and other benefits as appropriate for the Managing Director, by considering use of the Corporate KPIs in the annual assessment of performance in order to obtain the Board of Directors' approval.

8.1.2 MEETING ATTENDANCES AND REMUNERATION OF THE INDIVIDUAL BOARD OF DIRECTORS

(1) Meeting Attendances and Remuneration of the Board of Directors and SubCommittees in 2021

List of Directors	Meetings																	
	AGM			BOD			Ex-Com			AC			NRC			CG&RMC		
	physical	e-meeting	Total															
1. Mr. Plew Trivisvavet	1/1		1/1	3/7	4/7	7/7	10/11	1/11	11/11				3/4	1/4	4/4			
2. Mr. Vitoon Tejatussanasoontorn	1/1		1/1	3/7	4/7	7/7				1/4	3/4	4/4	3/4	1/4	4/4			
3. Gen. Chetta Thanajaro	1/1		1/1	3/7	4/7	7/7				1/4	3/4	4/4	3/4	1/4	4/4			
4. Prof. (adjunct) Athapol Yaisawang ⁽¹⁾				1/2	1/2	2/2												
5. Dr. Annop Tanlamai		1/1	1/1	1/7	6/7	7/7				1/4	3/4	4/4						
6. Mrs. Vallapa Assakul		1/1	1/1	1/7	6/7	7/7											2/2	2/2
7. M.L. Prasobchai Kasemsant		1/1	1/1	2/7	5/7	7/7												
8. Mr. Supong Chayutsahakij		1/1	1/1	2/7	5/7	7/7	10/11	1/11	11/11				3/4	1/4	4/4			
9. Mr. Phongsarit Tantisuvanitchkul	1/1		1/1	3/7	4/7	7/7	10/11	1/11	11/11								2/2	2/2
10. Mrs. Payao Marittanaporn		1/1	1/1	1/7	6/7	7/7	10/11	1/11	11/11								2/2	2/2
11. Miss Arisara Dharamadhaj		1/1	1/1	1/7	6/7	7/7												
12. Mr. Panit Dunnvatanachit		1/1	1/1	1/7	6/7	7/7												
13. Mr. Vithaya Punmongkol		1/1	1/1	2/7	5/7	7/7												
14. Mr. Piyakorn Apibalsri ⁽²⁾				1/2	1/2	2/2												
15. Mrs. Tasanuch Thammachot ⁽³⁾				1/4	3/4	4/4												
16. Dr. Sombat Kitjalaksana	1/1		1/1	3/7	4/7	7/7	10/11	1/11	11/11								2/2	2/2

Remarks:

⁽¹⁾ Prof. (adjunct) Athapol Yaisawang was appointed as director on October 27, 2021.

⁽²⁾ Mr. Piyakorn Apibalsri was appointed as director on October 27, 2021 to replace Mrs. Natamon Bunnak who resigned from her position as director on October 20, 2021.

⁽³⁾ Mrs. Tasanuch Thammachot was appointed as director on June 23, 2021.

(2) Remuneration for Directors

The Company establishes a clear and transparent policy on remuneration for directors in line with the scope of duties and responsibilities of each director serving as chairman or subcommittee member, subject to review by the Nomination and Remuneration Committee. The remuneration is at the same level as that in the same industry and sufficiently high to retain the qualified directors, by considering the appropriate remuneration according to the criteria for determination of the remuneration, namely:

- Remuneration is appropriate and commensurate with the scope of assigned duties and responsibilities of each director, such as Chairman of the Board of Director, chairmen of subcommittees, and a member of the Executive Board, the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Risk Management Committee, which will receive additional remuneration according to their respective positions.
- Remuneration of directors and the Managing Director is at an appropriate level and can motivate as well as retaining directors with knowledge, abilities and qualifications to effectively perform their duties for the Company in order to lead the organization towards both short-term and long-term goals.
- Components of remuneration are clear, transparent, and easy-to-understand.
- The Nomination and Remuneration Committee considers scrutinizing the remuneration to ensure that it remains appropriate, competitive and at the same rate as that offered by the same industry, which is sufficient to maintain and retain directors and the Managing Director with qualifications in line with the Company's business goals.

In 2021, the Company paid remuneration for directors as follows:

(1) Monetary remuneration

- (1.1) Remuneration for directors comprised annual remuneration, meeting allowance and bonus. In 2021, the total remuneration for directors amounted to Baht 30,002,533, in line with the resolution of its 2021 Annual Ordinary General Meeting of Shareholders which approved the remuneration for directors in the total amount not exceeding Baht 33,750,000, namely, bonus for directors for 2020 in an amount not exceeding Baht 15,750,000 and remuneration for directors for 2021 in an amount not exceeding Baht 18,000,000.

(Unit : Baht)

List of Directors	Remuneration for Directors 2021							Remuneration for Directors in Holding Directorships in Subsidiaries (NECL/BMN)
	Board of Directors	Executive Board	Audit Committee	Nomination and Remuneration Committee	Corporate Governance and Risk Management Committee	Total compensation for all Committees	Bonus of Committees 2020	
1. Mr. Plew Trivisvavet Deputy Chairman of the Board of Directors Chairman of the Executive Board Nomination and Remuneration Committee Member	1,000,000	975,000		200,000		2,175,000	1,775,000	NECL = 700,000
2. Mr. Vitoon Tejatussanasoontorn Director Chairman of the Audit Committee Nomination and Remuneration Committee Member	650,000		500,000	200,000		1,350,000	925,000	
3. Gen. Chetta Thanajaro Director Chairman of Nomination and Remuneration Committee Audit Committee Member	650,000		300,000	300,000		1,250,000	925,000	
4. Prof. (adjunct) Athapol Yaisawang ⁽¹⁾ Director Chairman of the Corporate Governance and Risk Management Committee Nomination and Remuneration Committee Member	153,804			4,620	9,239	167,663		

(Unit : Baht)

List of Directors	Remuneration for Directors 2021							Remuneration for Directors in Holding Directorships in Subsidiaries (NECL/BMN)
	Board of Directors	Executive Board	Audit Committee	Nomination and Remuneration Committee	Corporate Governance and Risk Management Committee	Total compensation for all Committees	Bonus of Committees 2020	
5. Dr. Annop Tanlamai Director Audit Committee Member	650,000		300,000			950,000	775,000	
6. Mrs. Vallapa Assakul ⁽²⁾ Director Corporate Governance and Risk Management Committee Member	650,000				245,381	895,381	825,000	
7. M.L. Prasobchai Kasemsant Director	650,000					650,000	675,000	
8. Mr. Supong Chayutsahakij ⁽³⁾ Director Executive Director Nomination and Remuneration Committee Member (1 Jan - 14 Dec 2021)	650,000	475,000		195,380		1,320,380	1,075,000	NECL = 246,703
9. Mr. Phongsarit Tantisuvanitchkul Director Executive Director Corporate Governance and Risk Management Committee Member	650,000	475,000			150,000	1,275,000	1,075,000	NECL = 400,000 BMN = 186,000
10. Mrs. Payao Marittanaporn ⁽⁴⁾ Director Executive Director Corporate Governance and Risk Management Committee Member (1 Jan - 14 Dec 2021)	650,000	475,000			145,380	1,270,380	1,075,000	NECL = 246,703
11. Miss Arisara Dharamadhaj Director	650,000					650,000	675,000	
12. Mr. Panit Dunnvatanachit Director	650,000					650,000	675,000	
13. Mr. Vithaya Punmongkol ⁽⁶⁾ Director	650,000					650,000	493,767	
14. Mr. Piyakorn Apibalsri ⁽⁶⁾ Director	153,804					153,804		
15. Mrs. Tasanuch Thammachot ⁽⁷⁾ Director	356,593					356,593		NECL = 3,699
16. Dr. Sombat Kitjalaksana Director Executive Director Corporate Governance and Risk Management Committee Member Managing Director	650,000	475,000			150,000	1,275,000	1,075,000	NECL = 400,000 BMN = 138,000
17. Dr. Virabongsa Ramangkura ⁽⁸⁾ Chairman of the Board of Directors							1,800,000	
18. Mrs. Natamon Bunnak ⁽⁹⁾ Director	444,565					444,565	675,000	
Total	9,908,766	2,875,000	1,100,000	900,000	700,000	15,483,766	14,518,767	2,321,105

Remarks:

⁽¹⁾ Prof. (adjunct) Athapol Yaisawang was appointed as director on October 27, 2021 and held the position of Chairman of the Corporate Governance and Risk Management Committee and concurrently held the position of the Nomination and Remuneration Committee Member on December 15, 2021.

⁽²⁾ Mrs. Vallapa Assakul was appointed as Chairman of the Corporate Governance and Risk Management Committee on January 1, 2021 until December 14, 2021.

- (3) Mr. Supong Chayutsahakij vacated the position as Nomination and Remuneration Committee Member on December 15, 2021 and resigned from the position as director of NECL on June 23, 2021.
- (4) Mrs. Payao Marittanaporn vacated the position as Corporate Governance and Risk Management Committee Member on December 15, 2021 and resigned from the position as director of NECL on June 23, 2021.
- (5) Mr. Vithaya Punmongkol was appointed as director on April 9, 2020.
- (6) Mr. Piyakorn Apibalsri was appointed as director on October 27, 2021.
- (7) Mrs. Tasanuch Thammachot was appointed as director on June 23, 2021.
- (8) Dr. Virabongsa Ramangkura was appointed as director on April 2, 2020.
- (9) Mrs. Natamon Bunnak was appointed as director on October 25, 2021.

(1.2) In 2021, NECL paid remuneration for its directors, comprising annual remuneration, meeting allowance, and bonus, in the total amount of Baht 2,381,996, in line with the resolution of its 2021 annual ordinary general meeting of shareholders which approved the remuneration for directors in an amount not exceeding Baht 2,700,000, namely, bonus for directors in 2020 in an amount not exceeding Baht 1,050,000 and remuneration for directors for 2021 in an amount not exceeding Baht 1,650,000.

(1.3) In 2021, BMN paid remuneration for its directors, comprising annual remuneration and meeting allowance, in the total amount of Baht 990,563, in line with the resolution of its 2021 annual ordinary general meeting of shareholders which approved the remuneration for directors for 2021 in an amount not exceeding Baht 1,014,000.

(2) Other remuneration for directors

- None -

8.1.3 SUPERVISION OF SUBSIDIARIES

To ensure that supervision of operations of the Company's subsidiaries is conducted in compliance with the business policy specified by the Board of Directors of the Company and in line with the Corporate Governance Code, and to safeguard investment benefits of the Company and its shareholders, the Board of Directors of the Company thus sets out criteria and guidelines for supervision and control of management of the subsidiaries, as follows:

1. The subsidiaries are encouraged to put the Corporate Governance Code into practice.
2. The selection of any persons as representatives of the subsidiaries is subject to the approval of the Board of Directors of the Company, according to their respective shareholding percentage.
3. The subsidiaries shall be supervised through representative directors and executives and policies specified by the parent company.
4. Any significant matters, such as strategies, action plan, capital increase or reduction, company dissolution, including various important policies shall be considered. The guidelines for exercising the right to cast votes in the shareholders' meetings are also formulated, as follows:

Guidelines for exercising of voting rights

(1) Approval of the minutes of the ordinary general meeting of shareholders/ extraordinary general meeting of shareholders

- To agree, if the proposed meeting minutes are based on fact and consistent with resolutions of the shareholders' meeting at the time.
- To abstain from voting, if no representative of the Company is present at the meeting at that time.

(2) Approval of annual financial statements

- To agree, if the auditor provides an unqualified or conditional opinion on the issue that is not material to the financial statements and does not affect the interests of shareholders as a whole.
- To disagree, if the auditor's opinion or comment on any part of the financial statements raises suspicions that it may contain incorrect information.

(3) Appointment of directors

- To agree, if the nominated persons have qualifications as required by law, knowledge, abilities and experiences which are beneficial to the business operations and can devote enough time to the company in which they are directors, and pay attention to the performance of their duties as director, provided that they are considered on an individual basis.
- To disagree, if it is to propose any former director to be re-elected and such director has a record of attendance at the Board of Directors' meetings of less than 75% without reasonable cause.

(4) Determination of remuneration for directors

- To agree, if the proposed remuneration for directors is suitable to the duties, responsibility and performance of the Board of Directors, which significantly reflects the Company's operational results.
- To abstain from voting, if a special remuneration payment is made without disclosing the amount, or if an ESOP is given that results in a significant dilution of the Company and is non-compliant with the regulatory units' rules.

(5) Appointment of auditor and determination of remuneration for auditor

- To agree, if the auditor and its audit firm are considered trustworthy, capable of accurately auditing and reviewing financial statements, and independent of all parties to provide opinions, including the proposed audit fee which is comparable to audit fee offered by other similar companies.
- To abstain from voting, if any doubts arise as to the auditor's reliability or independence, or if the audit fee dramatically differs from that in the previous year without reasonable grounds.

(6) Allocation of profit

- To agree with the allocation of profit as proposed by the Board of Directors if it is consistent with the dividend payment policy and is not contrary to the relevant laws.
- To disagree, if the dividend payment is not consistent with the Company's financial position and future action plans.

(7) Approval of other matters than items (1) – (6)

- To agree with the considered agenda that are beneficial to the Company or the public, the conditions and proposals are fair and reasonable, and the business is conducted ethically.
- To disagree, if the nature of the transaction is not an ordinary course of business and there is no explanation as to the reason and necessity for entering into such transactions.

(8) Consideration of other matters

- To disagree, especially with the primary agenda which must take time to study the information to make a decision, with such agenda or such matter probably being proposed to the next shareholders' meeting.

Appointment of a person to represent the Company at the shareholders' meeting

- The Managing Director or his delegate is assigned to supervise such company in his capacity as shareholder.

5. The operational results shall be followed up through the management, executive board, for reporting to the Board of Directors of the Company.

6. The subsidiaries shall be monitored to ensure their compliance with laws, relevant regulations stipulated by the regulatory units, including generally acceptable accounting standards.

The Company requires its subsidiaries to yearly review the respective internal control systems to ensure adequacy and appropriateness, whereby the Internal Audit Office of the Company shall regularly review, follow up and evaluate compliance with the good internal control principles, which is specified in the annual audit plan.

Furthermore, the Company has set rules for the persons assigned to supervise the subsidiaries in their capacity as major shareholders to ensure that the subsidiaries have their own regulations on connected transactions, asset acquisition or disposition, or execution of other significant transactions of the subsidiaries in order that they are complete, accurate, and follow the same rules related to information disclosure and the above-mentioned transactions as the Company's rules, as well as to supervise the collection of information and accounting records of the subsidiaries in order for the Company to examine and compile for preparation of consolidated financial statements in a timely manner.

In this regard, the Company has assigned the Managing Director or his delegate(s) to monitor its subsidiaries, in the Company's capacity as their major shareholder, whereby the delegates have been appointed as directors or executives to supervise and monitor operations of its subsidiaries to ensure compliance with the action plans and consistency with the policies of the Company as their major shareholder. In this connection, the Company has no other agreements with the subsidiaries' minority shareholders for administration.

8.1.4 MONITORING TO ENSURE COMPLIANCE WITH CORPORATE GOVERNANCE POLICY AND PRACTICES

1. Conflict of interest

The Company has established a policy that all directors, executives and staff should avoid entering to any related party transactions which may give rise to a conflict of interest between their personal and the Company's interest in dealing with business partners and other persons; however, if necessary to do so, such related party transaction must be proposed to the Audit Committee for consideration of giving opinions on its justification and the Company's potential benefits prior to requesting approval from the Board of Directors in accordance with the principles of the Corporate Governance Code. In addition, compliance with rules stipulated by the SET and the SEC Office must be ensured.

In 2021, the Company had no related party transactions.

2. Inside Information Usage

The Company has supervised the use of inside information in accordance with the principles of the Corporate Governance Code whereby it is defined as policy, which has been communicated to directors, executives and staff for acknowledgment and adherence, which can be summarized as follows:

- A director, executive or staff and/or person who has perceived insider information of the Company and is directly involved in the preparation of the Company's financial statements and the balance sheet, and/or any person who has perceived insider information of the Company and knows or should have known that the Company will disclose material information that may affect change in the market price of the Company's securities, is prohibited from purchasing or selling the Company's securities during the period of one month prior to the public disclosure of the financial statements and/or such information.
- Directors and executives shall submit the first report on their own securities holdings, their respective spouses and minor children's securities holdings in the Company; and report on every change in such securities holdings from purchase, sale, transfer or acceptance of transfer of securities, to the Office of the Securities and Exchange Commission in accordance with Section 59 of the Securities and Exchange Act B.E. 2535 (1992) within three business days from the date of purchase, sale, transfer or acceptance of transfer of securities, and the Company regularly reminds the Board of Directors thereof. Directors and executives are also required to report on their securities trading or holdings to the Board of Directors' Meeting on a quarterly basis.

In 2021, the Board of Directors and executives complied therewith strictly, no any violation or non-compliance with the criteria for securities trading by usage of the inside information and asset trading under the rules of the SET and the Office of the Securities and Exchange Commission was found.

3. Anti-corruption

The Company realizes and gives priority to anti-corruption and fraud prevention, both inside and outside its organization. The Company thus formulates guidelines on proper conducts of directors, executives and staff via the code of business ethics of the Company. Furthermore, with the potential damage from corruption in mind, the Company then formulates anti-corruption policy containing the key practical guidelines as follows:

1. The Company's staff at all levels should carry out activities with fairness, integrity and transparency in business dealings with various agencies, provided that such activities must be lawful, and they have the duty to comply with the anti-corruption policy in the code of business ethics of the Company;
2. The Company promotes fair treatment with integrity towards its traders and compliance with any contractual commitments made with the Company's stakeholders;

3. Executives' and staff's awareness must be promoted to ensure that they refrain from committing any fraud and realize consequences of corruption;
4. Directors, executives and staff must refrain from accepting or offering any reception, gifts, and any other payments which are extravagant and unusual to those in business dealings with the Company; and
5. The Company arranges for staff training to educate them regarding the anti-corruption policy, practices and guidelines.

In this regard, the Company has reviewed the completeness and sufficiency of various processes to prevent the risk of corruption through the internal audit process under the internal audit plan, including additional audits as assigned by the management on a yearly basis.

In 2021, the Company sent the Company's Code of Conduct Compliance Survey for 2021 via the online system to staff at all levels for their self-assessment and awareness that they in no way violate the Company's rules or policies which may lead to corruption and disgrace to the Company, and refrain from accepting any items or benefits from business partners, contractual parties, or persons with an interest in the Company's business, while remaining committed to adhering to fair business practices on a basis of decision-making and benchmark for price, quality, including services in a transparent and auditable manner. Under any circumstances, they are not allowed to demand that business partners and contractual parties offer or receive any benefits in the course of business. Meanwhile, the Company has provided new staff with an orientation on the work rules and regulations, with penalties for unethical conduct, which will be acknowledged and used as a guideline for further operations.

4. Whistleblowing

The Company provides whistleblower channels through which stakeholders of all groups can contact and complain about matters which may cause damage to the Company or found any behavior or incidents which may violate or breach the code of conduct or policies. They are allowed to file such report or complain directly to the Audit Committee Chairman or an independent director or contact via the Company Secretary.

Audit Committee Chairman	:	Bangkok Expressway and Metro Public Company Limited
Independent Directors	:	238/7 Asoke-Dindaeng Road, Bangkokpi Subdistrict,
Company Secretary	:	Huai Khwang District, Bangkok 10310
Telephone	:	0 2641 4611
E-mail	:	companysecretary@bemplc.co.th

In 2021, there was no clue and complaint about corruption or violation of the Company's corporate governance policy.

5. Report on Interests of Directors and Executives

The Board of Directors imposes a duty on its directors and executives to report on their personal interests and disclose information on their holdings of directorships or executive positions in other legal entities, and their shareholdings in other legal entities in excess of 25 percent of total voting shares and this obligation applies to both reporters and their related persons. This is to ensure that the Board of Directors has information in support of its consideration and approval of execution of transactions of the Company and its subsidiaries with accuracy and transparency in compliance with the relevant rules and regulations.

The Company Secretary keeps such reports on interests of directors and executives, and also provides copies of such reports to the Chairman of the Board of Directors and the Audit Committee Chairman within seven business days from the date of the Company's receipt of such reports.

Report of Securities Holding of Directors and Executives for 2021

Directors / Executives	Number of Ordinary Shares			
	As of December 31, 2020	Change in 2021	As of December 31, 2021	
			Amount	%
Directors				
1. Mr. Plew Trivisvavet	25,606,878	(4,511,933)	21,094,945	0.1380
The spouse	2,402,527	-	2,402,527	0.0157
2. Mr. Vitoon Tejatussanasoontorn	-	-	-	-
3. General Chetta Thanajaro	-	-	-	-
4. Prof. (adjunct) Athapol Yaisawang	-	-	-	-
5. Dr. Annop Tanlamai	-	-	-	-
6. M.L. Prasobchai Kasemsant	-	-	-	-
7. Mr. Supong Chayutsahakij	-	-	-	-
8. M.L. Prasobchai Kasemsant	-	-	-	-
9. Mr. Phongsarit Tantisuvanitchkul	-	2,500,000	2,500,000	0.0163
10. Mrs. Payao Marittanaporn	-	-	-	-
11. Miss Arisara Dharamadhaj	-	-	-	-
12. Mr. Panit Dunnvatanachit	-	-	-	-
13. Mr. Vithaya Punmongkol	-	-	-	-
14. Mr. Piyakorn Apibalsri	-	-	-	-
15. Mrs. Tasanuch Thammachot	-	-	-	-
16. Dr. Sombat Kitjalaksana	2,999,141	-	2,999,141	0.0196
Executives				
17. Mr. Sanguan Kunatinun	-	-	-	-
18. Miss Panan Tosuwanthaworn	-	-	-	-
19. Mr. Witoon Hatairatana	-	-	-	-
20. Mr. Alvin Gee	-	-	-	-
21. Dr. Vites Techangam	-	-	-	-
22. Mr. Anawash Suwanarit	-	-	-	-

8.2 REPORT ON PERFORMANCE OF THE AUDIT COMMITTEE IN THE PREVIOUS YEAR

8.2.1 INDIVIDUAL MEETING ATTENDANCE OF THE AUDIT COMMITTEE

In 2021, the Audit Committee held its four meetings, which can be summarized as follows:

Name	Position	Number
1. Mr. Vitoon Tejatussanasoontorn	Audit Committee Chairman	4/4
2. General Chetta Thanajaro	Audit Committee Member	4/4
3. Dr. Annop Tanlamai	Audit Committee Member	4/4



For more information, please see Attachment 6: Report of the Audit Committee and Reports of Sub - Committees

8.3 REPORTS ON PERFORMANCE OF SUB - COMMITTEES

8.3.1 REPORT ON PERFORMANCE OF THE NOMINATION AND REMUNERATION COMMITTEE

In 2021, the Nomination and Remuneration Committee held its four meetings, which can be summarized as follows:

Name	Position	Number
1. General Chetta Thanajaro	Nomination and Remuneration Committee Chairman	4/4
2. Mr. Vitoon Tejatussanasoontorn	Nomination and Remuneration Committee Member	4/4
3. Mr. Plew Trivisvavet	Nomination and Remuneration Committee Member	4/4
4. Prof. (adjunct) Athapol Yaisawang *	Nomination and Remuneration Committee Member	N/A

Remark: * Holding the position as the Nomination and Remuneration Committee Member in place of Mr. Supong Chayutsahakij on December 15, 2021.



For more information, please see Attachment 6: Report of the Audit Committee and Reports of Sub - Committees

8.3.2 Report on Performance of the Corporate Governance and Risk Management Committee

In 2021, the Corporate Governance and Risk Management held its two meetings, which can be summarized as follows:

Name	Position	Number
1. Prof. (adjunct) Athapol Yaisawang *	Corporate Governance and Risk Management Chairman	N/A
2. Mrs. Vallapa Assakul	Corporate Governance and Risk Management Member	2/2
3. Mr. Phongsarit Tantisuvanitchkul	Corporate Governance and Risk Management Member	2/2
4. Dr. Sombat Kitjalaksana	Corporate Governance and Risk Management Member	2/2

Remark: * Holding the position as the Corporate Governance and Risk Management Member in place of Mrs. Payao Marittanaporn on December 15, 2021.



For more information, please see Attachment 6: Report of the Audit Committee and Reports of Sub - Committees

9 INTERNAL CONTROL AND CONNECTED TRANSACTIONS

9.1 INTERNAL CONTROL

The Board of Directors continues to realize the significance of its good and effective internal control system, including its good corporate governance guidelines, in the belief that a good internal control system lies in a good performance process, organization chart and work system, which can help the Company achieve its goals or missions with efficiency and effectiveness, as well as minimize risks and prevent possible risks and damage in the Company's business operations. The Board of Directors has thus authorized the Audit Committee comprising independent directors to audit the evaluation of the effectiveness of the internal control system. The Internal Audit Office, which independently performs its duty and directly reports to the Audit Committee, shall have the duty to audit the work operation systems in various departments of the Company as per the annual audit plan approved by the Audit Committee, with an aim of ensuring each department's efficient and effective performance of work and optimum use of the Company's resources, as well as ensuring corruption control and prevention. This also includes the control of the work performance, and the accurate, reliable and timely financial reporting, as well as the compliance with the policies as well as laws and regulations of the government agencies and relevant authorities. Furthermore, the effectiveness of the internal control system is regularly reviewed to ensure the optimum benefit to the shareholders from the business operation based on fairness in terms of benefits to all stakeholders. In addition, the Audit Committee shall have the duties to consider, select and submit for the appointment of the auditor, including remuneration of the auditor, consider accurate and complete disclosure of the Company's connected transactions or any transactions which may give rise to any conflicts of interest.

The Board of Directors has evaluated the adequacy of the internal control system based on the Internal Control Adequacy Evaluation Form, taking into consideration five components, i.e., corporate internal control, risk assessment, control measures, information and communication system, and follow-up system. It was concluded that the Company's internal control system was considered adequate and appropriate to the business operations; no material defect in the internal control system was found; and control and prevention of corruption and improper or unauthorized use by executives or employees of the property of the Company and the subsidiaries could be efficiently conducted; the financial reports of the Company were accurate and reliable in accordance with the generally accepted accounting standards and the financial reporting standards; and the Company's business operations were in full compliance with the law on securities and exchange and other applicable laws.

In addition, the Internal Audit Office has reviewed various work systems under the annual audit plan 2021, which was approved by the Audit Committee in the Audit Committee's Meeting No. 5/2020, held on November 12, 2020, to evaluate the adequacy of the internal control system, corruption control and prevention, and compliance with the rules, regulations established by the Company, as well as applicable laws.

The results of such review indicates that the Company has an adequate internal control system in place, has conducted operations in accordance with rules, regulations and compliant with applicable laws, and has risk management measures, without findings of any flaws or indications of corruption in any material respect, as well as providing sufficient personnel to carry out such operations effectively, monitors and supervises the subsidiaries' operations to ensure that they can protect the property of the Company and its subsidiaries from the improper or unauthorized use by directors or executives.

The Company found no flaws in the internal control system during the previous period. The Internal Audit Office, on the other hand, gave recommendations for boosting operational efficiency in order to assure greater rapidity and decrease in repetitive activities, that the audited work units acknowledge, monitor, and report on monitoring results at each Audit Committee' meeting, with such recommendations for improvement being completely implemented.

The Board of Directors, the Audit Committee and the auditor's opinions have coincided that the Company's business operations are based on the Corporate Governance Code, transparency, with the Company having the suitable and effective internal control system which is capable of preventing improper or unauthorized use of the Company's property by executives or employees.

The Audit Committee' Meeting No. 1/2022 held on February 23, 2022 appointed Miss Orathai Ruangamporn as the Company's Head of the Internal Audit Unit from January 1, 2022, due to the fact that she had knowledge in accounting, had experience in external audit work from KPMG Phoomchai Audit Co., Ltd. for a period of 5 years, had attended training courses related to internal audit operations, including, Digital Risk Management, Audit Manager Tools and Techniques, Accounting Tips for AC, while also having an understanding of the activities and operations of the Company, and as a result, was of the opinion that she was qualified to appropriately and adequately perform such duties.

In this regard, the consideration and approval, appointment, removal, transfer of the person holding office as the Company's Head of the Internal Audit Unit shall be subject to the Audit Committee's approval. The qualifications of the person holding office as Head of the Internal Audit Unit are described in Attachment 3.



For more information, please see Attachment 3: Information of Head of Internal Audit and Head of Compliance Unit of the Company

9.2 CONNECTED TRANSACTIONS

9.2.1 CRITERIA AND PROCEDURES FOR APPROVAL OF EXECUTION OF CONNECTED TRANSACTIONS

Transactions with persons who may have a conflict of interest are subject to the conditions and criteria in the ordinary course of business. The execution of connected transactions and transactions with a conflict of interest are in accordance with the regulations of the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.

In the consideration and approval of any connected transaction, the Company shall propose such matter to the Board of Directors' Meeting, in which the directors having any involvement which may give rise to a conflict of interest shall not be entitled to attend and vote on such matter. Furthermore, the Audit Committee, as assigned by the Board of Directors, shall consider justification of the transaction, including the disclosure of the Company's information in respect of the connected transaction or the transaction which may have a conflict of interest, to ensure accuracy and completeness.

In respect of connected transactions with general commercial terms which the Company and its subsidiaries have or may have in the future, the Company already requested approval in principle from the Board of Directors' Meeting.

9.2.2 POLICY OR TREND OF FUTURE CONNECTED TRANSACTIONS

The Company shall comply with the requirements and regulations of the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand, as well as the rules on disclosure of information on connected transactions and acquisition and disposition of material assets of the Company and its subsidiaries, including the accounting standards as prescribed by the Federation of Accounting Professions. In the future, engagement of a group of persons who may have a conflict of interest for construction, project management, maintenance, may be carried out, with the Board of Directors and the Audit Committee jointly considering the necessity and justification for execution of such transaction, as well as pricing and conditions on the execution of such transaction whether they are in the ordinary course of business, and in comparison with third party prices or market price, provided that the interested parties shall not take part in the consideration and approval for execution of the transaction. The Company has no policy for lending loans or providing guarantee to any person who may have a conflict of interest in accordance with the definition of the SEC Office.

In case that the Audit Committee has no expertise to consider any potential connected transaction, the Company will arrange for an independent expert or the Company's auditor to provide an opinion on such connected transaction in support of the decision-making by the Board of Directors and/or the Audit Committee or shareholders, as the case may be. In this regard, the Company discloses its connected transactions in the Company's notes to the financial statements as audited or reviewed by the Company's auditor.

9.2.3 CONNECTED TRANSACTIONS OF THE COMPANY AND THE SUBSIDIARIES WITH PERSONS WHO MAY HAVE A CONFLICT OF INTEREST

1. Transactions of the Company and its Subsidiaries with CH. Karnchang Public Company Limited ("CK")

CK engages in the construction business and a full range of development, investment and management of large-scale infrastructure concession projects within the country and the region. CK is connected with the Company since CK is the Company's major shareholder, holding shares in the Company representing 31.32¹ percent. CK and the Company also have common directors, namely, (1) Mr. Plew Trivisvavet, (2) Mr. Phongsarit Tantisuvanitchkul, and (3) Mrs. Payao Marittanaporn, the Company's director who is the spouse of Mr. Prasert Marittanaporn, CK's director.

Transaction	Transaction Volume (Million Baht)			Transaction Nature/Necessity and Justification
	2021	2020	2019	
Repair, Improvement of the Structures and System Works of the Expressways				
<u>Transaction with the Company</u>				
- Improvement of the structures of the expressways	758.12	814.24	742.88	The Company and its subsidiary have engaged the specialist company in inspection of the expressway structures on a yearly basis according to the specified schedule, covering all responsible routes to ensure that the expressway structures are in good condition. If a defect that requires repair is found, the Company and its subsidiary will seek approval to proceed in accordance with the relevant regulations.
- Costs of repair of the structures of the expressways	-	35.50	209.55	
- Trade payable	51.85	12.14	92.01	
<u>Transaction with the Subsidiary</u>				
- Improvement of the structures of the expressways	69.13	-	-	In the past 3 years, the Company and its subsidiary have engaged CK to repair and improve the expressway structures as follows: 1) No.4, Phase 2: The Si Rat Expressway, Sector C (Prachachuen - Chaeng Watthana), and a part of Sector B (Uruphong - Phayathai) on August 17, 2018, with the total value of Baht 32 Million. 2) Construction and improvement of the structures of the Si Rat Expressway and the Si Rat - Outer Ring Road Expressway on January 23, 2019, with the total value of Baht 780 Million. 3) No. 4, Phase 3: The Si Rat Expressway, Sector B (Uruphong - Bang Klo) and the Si Rat - Outer Ring Road Expressway, on August 16, 2019, with the total value of Baht 233 Million. Subsequently, on July 17, 2020, the Company executed the Variation Order, with the value of Baht 4 Million. 4) Construction and improvement of the structures and system works of the Si Rat Expressway on April 14, 2020, with the total value of Baht 831 Million. 5) Improvement of the structures and system works, and No. 4, Phase 4: The Si Rat Expressway and the Si Rat - Outer Ring Road Expressway on December 21, 2020, with the total value of Baht 920 Million, and the Udon Rattthaya Expressway under the responsibility of the subsidiary, with the total value of Baht 86 Million.
- Trade payable	6.00	-	-	
				The Audit Committee is of the opinion that the above-mentioned engagement is reasonable and beneficial to the Company and its subsidiary, due

¹ Information as at the closing date of the share register for suspension of the share transfer of the Company on May 10, 2021.

Transaction	Transaction Volume (Million Baht)			Transaction Nature/Necessity and Justification
	2021	2020	2019	
Repair, Improvement of the Structures and System Works of the Expressways (Continued)				to the fact that CK has experience in the construction of many expressway projects, with potential, ability, and readiness in machinery, equipment and personnel, and moreover, the work prices are reasonable and lower than the prices as appraised by the Company and the independent certification engineer.
Management of Civil Infrastructure and Electrical and Mechanical Systems Maintenance for the MRT Project				<p>To ensure that the Company is committed to providing the MRT service with the optimum efficiency while lowering the burden of maintenance work, which dealings with many maintenance service providers had caused problems on arguments for the Company, thereby wasting time and manpower, as such, the Company has implemented a policy to engage the specialist in civil and E&M infrastructure to conduct management of maintenance work.</p> <p>Over the previous period, the Company has engaged CK to conduct management of the civil and E&M infrastructure maintenance work as follows:</p> <p>1) On November 17, 2015, the Project Management Agreement was entered into for the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) for a period of 8 years and ending in 2023, with the total contract value of Baht 1,270 Million.</p> <p>On August 29, 2018, the Project Management Agreement was entered into for the MRT Blue Line Extension Project for a period of 8 years and 6 months, ending in 2027, together with the extension of the contract term of the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) for another 3 years and 5 months to end at the same time as the Agreement for the MRT Blue Line Extension Project, with the total value of Baht 2,778 Million.</p> <p>2) On November 17, 2015, the Project Management Agreement was entered into for the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), for a period of 8 years, ending in 2023, with the total contract value of Baht 1,520 Million. Subsequently, on December 14, 2016, additional engagement was carried out for the Bang Sue - Tao Poon Station, with the contract value of Baht 155 Million, for a period of 7 years, ending in 2023.</p> <p>The Audit Committee is of the opinion that the above-mentioned engagement is reasonable and beneficial to the Company, due to the fact that CK has readiness and has supplied and installed equipment of the MRT project from the beginning, thereby resulting in the continuity in the operation, and moreover, the work prices are reasonable and lower than the prices as appraised by the independent expert.</p>
- Cost of maintenance of civil infrastructure and electrical and mechanical systems	338.15	549.03	385.85	
- Replacement of M&E Systems	137.19	467.91	4.50	
- Trade payable	27.82	389.49	204.50	

Transaction	Transaction Volume (Million Baht)			Transaction Nature/Necessity and Justification
	2021	2020	2019	
Project Management, as well as Supply, Installation, and Test Run and Commissioning of M&E Equipment for the MRT Blue Line Project - Project management cost - Trade payable	- -	1,523.14 -	5,560.61 455.40	<p>To ensure that the supply, installation and test run and commissioning of M&E equipment for the MRT Blue Line Extension Project are completed within the period specified in the Concession Agreement, and no cost overrun incurs.</p> <p>On June 20, 2017, the Company executed Project Management Agreement with CK for Project Management, as well as Supply, Installation, and Test Run and Commissioning of M&E Equipment for the MRT Blue Line Project, in the total amount of Baht 19,643 Million</p> <p>On February 9, 2018, the Company executed the Variation Order for construction and improvement of the administrative building in the area of Huai Khwang Depot, as well as supply and installation of the (additional) M&E Equipment, in the total amount of Baht 558 Million.</p> <p>On July 12, 2018, the Company executed the Variation Order for expediting the opening of the train operation ahead of schedule and installation of the telecommunication network system inside metro stations of the MRT Blue Line Extension Project, in the total amount of Baht 898 Million.</p> <p>On January 7, 2020, the Company executed the Variation Order for the M&E Equipment and the Civil Work as assigned by MRTA which were beyond the scope of works under the existing Agreement in the total amount of Baht 293 Million.</p> <p>The Audit Committee is of the opinion that the above-mentioned engagement is reasonable and beneficial to the Company, due to the fact that CK has potential, experience and expertise, and used to carry out project management in design, supply, and installation of M&E equipment for the MRT projects on a Lump Sum Turnkey basis for the Company, with CK completing such work according to schedule, budget, and with the quality work performance. The work prices are reasonable and lower than the prices as appraised by the independent expert.</p>
Office Space Lease in Viriyathavorn 2 Building - Office space rental and service charge - Trade payable	8.81 0.09	8.79 0.09	8.44 0.09	<p>The subsidiary has taken a lease on Viriyathavorn 2 Building with CK, for the term of 3 years, ending on July 9, 2022. The office rental rate was comparable to the rental rates charged by the lessor to third party lessees.</p>

2. Transactions of the Company and its Subsidiary with Mass Rapid Transit Authority of Thailand ("MRTA")

MRTA engages in mass rapid transit business and other business for the benefit of Mass Rapid Transit Authority of Thailand and the people in using the mass rapid transit service. MRTA is connected with the Company since MRTA holds shares in the Company representing 8.22² percent. In addition, MRTA's directors and executives, namely: (1) Mr. Piyakorn Apibalsri, and (2) Mr. Vithaya Punmongkol, are directors of the Company.

Transaction	Transaction Volume (Million Baht)			Transaction Nature/Necessity and Justification
	2021	2020	2019	
Remuneration from Farebox Revenue and Commercial Development Revenue				
- Remuneration from farebox revenue and commercial development revenue	220.64	350.69	393.65	The transaction was in accordance with the conditions of the Concession Agreement.
- Prepaid project remuneration	9,775.52	7,307.90	5,086.37	
- Building and land taxes	3.40	1.87	14.81	
- Trade and other payables	234.10	224.99	213.21	
Space Lease for Billboard Installation				
- Remuneration for space use	9.58	9.90	9.21	The subsidiary took a lease on the space of MRTA for the purpose of commercial development, at the rental rate according to the market price.
- Building and land taxes	-	0.86	1.32	

² Information as at the closing date of the share register for suspension of the share transfer of the Company on May 10, 2021.

PART

3

FINANCIAL
STATEMENTS

FINANCIAL STATEMENTS

REPORT ON RESPONSIBILITIES OF THE BOARD OF DIRECTORS TOWARDS THE FINANCIAL REPORT

The Company's Board of Directors realizes the significance of its duties and responsibilities in supervising the Company's business to ensure good management in accordance with laws, objectives and the Company's Articles of Association, as well as resolutions of the shareholders' meetings with integrity and prudence. The Board of Directors protects the benefits of the Company, shareholders and general investors by ensuring that the Company's financial report contains accurate and full accounting records that reflect the Company's actual financial status and operational results.

The Company's Board of Directors appointed the Audit Committee comprising independent directors fully qualified in accordance with the requirements of the Stock Exchange of Thailand to review and ensure accuracy and sufficiency of the financial report, including accurate and complete disclosure of connected transactions or transactions with possible conflict of interest, in compliance with the requirements of the Stock Exchange of Thailand and relevant rules and regulations. In this regard, the Audit Committee has already reported its performance to the Company's Board of Directors.

The Company's Board of Directors is of the opinion that the financial statements for 2021 of the Company and the Subsidiaries, which have been reviewed by the Audit Committee in conjunction with the management, and audited by the Company's auditor, reflect accurate financial status and operational results as appropriate in material aspects in accordance with generally accepted accounting principles.

(Dr. Sombat Kitjalaksana)

Managing Director

23 February 2022

INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Bangkok Expressway and Metro Public Company Limited

OPINION

I have audited the accompanying consolidated financial statements of Bangkok Expressway and Metro Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2021, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of Bangkok Expressway and Metro Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Bangkok Expressway and Metro Public Company Limited and its subsidiaries and of Bangkok Expressway and Metro Public Company Limited as at 31 December 2021, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

BASIS FOR OPINION

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants as issued by the Federation of Accounting Professions as relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

EMPHASIS OF MATTER

I draw attention to Note 1.2 to the consolidated financial statements, the Coronavirus disease 2019 pandemic is adversely impacting various businesses and industries. This situation significantly affects the Group's

business activities in terms of commuter numbers on both the expressway and metro systems and this significantly impacts the Group's revenue while opening hours are reduced and organisations are supporting work from home policies. The Group's management has continuously monitored ongoing developments and assessed the financial impact as the situation has changed. My opinion is not modified in respect of this matters.

KEY AUDIT MATTERS

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

Recognition of toll revenue, toll revenue sharing and fare box revenue

The Group recognises toll revenue, toll revenue sharing and fare box revenue in accordance with the accounting policy disclosed in Note 4.1 to the consolidated financial statements. The revenue accounts are the most significant amounts in the statement of income. In addition, the Group's service income is derived from numerous transactions and varies in terms of the toll and fare box rates. I have therefore paid attention to the audit of the measurement of the related transactions recorded by the Group.

I have examined the revenue recognition of the Group by assessing and testing the internal controls relevant to the revenue cycle of the Group, including the related information technology systems, by making inquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operation of the designed controls. In addition, I have examined the measurement and completeness of the revenue information that the Group used for accounting purposes by performing live audit testing and traffic volume observation. On a sampling basis, I examined documents supporting actual revenue transactions occurring during the year. I also performed analytical procedures on disaggregated data to detect possible irregularities in sales transactions throughout the period, particularly for accounting entries made through journal vouchers.

Recognition of capital expenditures

During the year ended 31 December 2021, the Group had capital expenditures amounting to Baht 1,909 million that were recorded as “rights to operate expressway sectors, intangible assets under concession agreement of the MRT Blue Line Project and project cost of the MRT Chalong Ratchadham Line”, as disclosed in Notes 15, 16 and 17 to the consolidated financial statements. I considered the recognition of capital expenditures as assets to be a significant transaction. In addition, management needed to exercise substantial judgment in determining whether the costs were direct costs and could be recognised as costs of acquiring intangible assets if they met the conditions stipulated under financial reporting standards.

I assessed the Group's recognition of capital expenditures during the year by inquiring with management to gain an understanding of the basis applied and judgement exercised by management in capitalising expenses as assets and the disclosures in the notes to the financial statements. I reviewed the minutes of meetings, contracts and documents related to the capital expenditures. I also selected and checked representative samples of supporting documents for expenses recognised as assets during the year to determine whether the recognition met the criteria under financial reporting standards and reviewed the disclosures in the notes to the financial statements.

Intangible assets under concession agreement of the MRT Blue Line Project

As at 31 December 2021, the Company has intangible assets under concession agreement of the MRT Blue Line Project amounting to Baht 45,369 million in the consolidated financial statements, or equal to 39.42 percent of total assets. The Company commenced operation of the Through Operation systems of the MRT Blue Line Project on 30 March 2020 and it has been significantly affected by the Coronavirus disease 2019 pandemic, which has affected commuter numbers on the metro system and significantly impacted the project's revenue while opening hours are reduced and organisations are supporting work from home policies. The assessment of impairment of intangible assets under the concession agreement of the MRT Blue Line Project requires the management to exercise a high degree of judgement in forecasting operating results, estimating the cash inflows that are expected to be generated in the future, and setting an appropriate discount rate, growth rate and other assumptions.

I assessed the impairment assessment performed by management on intangible assets under the concession agreement of the MRT Blue Line Project by gaining an understanding of and evaluating the financial model selected by the management and evaluating the key assumptions applied by the management in preparing plans and projecting the cashflows to be generated from those assets in the future by gaining an understanding of the process through which the figures were derived, comparing the assumptions with external and internal sources of information, and reviewing the cashflow projections in comparison with the actual operating results. I also evaluated the discount rate applied by analysing the weighted average cost of capital and other information and reperforming the calculation of expected future cashflows under the financial model. In addition, I considered the sensitivity of the cashflow projections to key assumptions, especially the discount rate and revenue growth rate.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when

it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other

matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.



Isaraporn Wisutthiyon

Certified Public Accountant (Thailand) No. 7480

EY Office Limited
Bangkok: 23 February 2022

STATEMENT OF FINANCIAL POSITION

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of financial position

As at 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Assets					
Current assets					
Cash and cash equivalents	7	1,131,367,911	1,613,584,108	595,974,028	1,214,091,489
Bank deposit for unearned fare box revenue	8	225,201,031	224,486,696	225,201,031	224,486,696
Trade and other receivables	9	473,252,353	548,903,316	474,835,489	512,750,654
Current portion of receivable under the concession agreement	10	1,649,683,274	1,649,683,274	1,649,683,274	1,649,683,274
Current tax assets		120,971,846	125,377,096	115,868,135	125,377,096
Other current financial assets	11	765,670,719	761,275,133	765,670,719	761,275,133
Other current assets					
Prepaid expenses		92,564,380	90,825,229	88,690,123	85,521,468
Advance payment for service contracts		44,566,316	17,783,816	41,991,312	17,783,816
Spare parts		26,633,266	-	26,633,266	-
Others		10,729,409	11,835,188	5,135,588	6,176,149
Total current assets		4,540,640,505	5,043,753,856	3,989,682,965	4,597,145,775
Non-current assets					
Receivable under the concession agreement, net of current portion	10	5,911,365,066	7,561,048,340	5,911,365,066	7,561,048,340
Other non-current financial assets	11	15,909,924,565	15,840,737,472	15,909,924,565	15,840,737,472
Investments in subsidiaries	12	-	-	767,729,867	644,580,180
Investment properties	13	120,357,493	120,357,493	120,357,493	120,357,493
Building and equipment	14	383,984,663	379,278,437	360,192,223	346,698,738
Right-of-use assets	24	139,696,152	86,514,411	51,763,824	58,433,907
Rights to operate expressway sectors	15	31,920,531,506	31,701,521,503	27,241,674,791	26,965,266,678
Intangible asset under concession agreement of the MRT Blue Line Project	16	45,368,623,475	44,683,719,344	45,095,803,584	44,376,999,264
Project cost of the MRT Chalong Ratchadham Line	17	676,752,990	660,436,487	676,752,990	660,436,487
Prepaid project remuneration	6	9,775,518,134	7,307,904,942	9,775,518,134	7,307,904,942
Other intangible assets	18	48,351,411	63,165,051	45,676,244	58,266,063
Deferred tax assets	33	16,310,587	13,651,112	-	-
Other non-current assets		276,442,889	153,669,851	263,911,925	137,144,714
Total non-current assets		110,547,858,931	108,572,004,443	106,220,670,706	104,077,874,278
Total assets		115,088,499,436	113,615,758,299	110,210,353,671	108,675,020,053

The accompanying notes are an integral part of the financial statements.

STATEMENT OF FINANCIAL POSITION (Continued)

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	19	2,000,000,000	3,000,000,000	2,000,000,000	3,000,000,000
Trade and other payables	20	1,492,413,420	1,744,651,781	1,422,538,023	1,749,756,519
Current portion of long-term loans from financial institutions	21	3,544,204,069	3,745,161,069	2,861,764,069	3,091,761,069
Current portion of lease liabilities	24	44,749,169	45,512,736	25,374,022	25,670,777
Current portion of debentures	22	3,000,000,000	4,615,000,000	3,000,000,000	4,615,000,000
Unearned fare box revenue	8	221,885,631	228,290,262	221,885,631	228,290,262
Deposits on stored value ticket		86,567,897	87,727,497	86,567,897	87,727,497
Income tax payable		27,693,411	41,623,582	-	-
Current portion of derivative financial liabilities		-	11,860,783	-	11,860,783
Other current financial liabilities		102,555,542	64,602,760	95,813,158	59,707,336
Other current liabilities					
Value added tax payable		52,830,593	64,913,271	36,124,502	49,916,533
Withholding tax deducted at source payable		39,536,369	59,123,553	37,340,349	56,273,728
Others		33,041,963	25,094,642	32,193,082	23,346,096
Total current liabilities		10,645,478,064	13,733,561,936	9,819,600,733	12,999,310,600
Non-current liabilities					
Long-term loans from financial institutions, net of current portion	21	25,609,412,070	23,670,054,666	23,275,884,296	21,002,958,324
Lease liabilities, net of current portion	24	92,659,628	40,912,590	25,628,758	32,841,181
Debentures, net of current portion	22	37,057,371,553	34,057,924,287	37,057,371,553	34,057,924,287
Derivative financial liabilities, net of current portion		95,880,794	173,936,021	95,880,794	173,936,021
Unearned revenue from advertising management rights	23	-	-	8,120,323	9,368,683
Provision for long-term employee benefits	25	770,896,288	932,330,697	744,829,551	904,695,538
Deferred tax liabilities	33	3,108,954,593	2,959,530,701	3,108,954,593	2,959,530,701
Other non-current liabilities		9,014,047	13,782,769	6,348,700	10,966,408
Total non-current liabilities		66,744,188,973	61,848,471,731	64,323,018,568	59,152,221,143
Total liabilities		77,389,667,037	75,582,033,667	74,142,619,301	72,151,531,743

The accompanying notes are an integral part of the financial statements.

STATEMENT OF FINANCIAL POSITION (Continued)

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Shareholders' equity					
Share capital					
Registered					
15,285,000,000 ordinary shares of Baht 1 each		15,285,000,000	15,285,000,000	15,285,000,000	15,285,000,000
Issued and fully paid-up					
15,285,000,000 ordinary shares of Baht 1 each		15,285,000,000	15,285,000,000	15,285,000,000	15,285,000,000
Premium on ordinary shares		5,816,938,084	5,816,938,084	5,816,938,084	5,816,938,084
Capital deficit from change in shareholding in subsidiaries		(346,046,294)	(264,641,165)	-	-
Retained earnings					
Appropriated - statutory reserve	26	1,502,600,000	1,464,000,000	1,502,600,000	1,464,000,000
Unappropriated		15,193,997,725	15,572,592,087	7,030,014,932	7,651,651,354
Other components of shareholders' equity		244,792,547	117,510,065	6,433,181,354	6,305,898,872
Equity attributable to shareholders of the Company		37,697,282,062	37,991,399,071	36,067,734,370	36,523,488,310
Non-controlling interests of the subsidiaries		1,550,337	42,325,561	-	-
Total shareholders' equity		37,698,832,399	38,033,724,632	36,067,734,370	36,523,488,310
Total liabilities and shareholders' equity		115,088,499,436	113,615,758,299	110,210,353,671	108,675,020,053

The accompanying notes are an integral part of the financial statements.

INCOME STATEMENT

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Income statement

For the year ended 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Revenues					
Revenue from expressway business		6,450,160,064	8,144,975,668	5,490,299,714	6,942,076,712
Revenue from rail business		3,454,408,377	4,519,840,374	3,454,408,377	4,519,840,374
Revenue from commercial development business	28	822,153,949	824,644,414	745,500,142	723,606,929
Other income					
Gain on sale of investment in financial assets		-	3,530,367	-	3,364,485
Interest income		227,222,451	296,044,829	225,696,287	295,071,557
Dividend income	6	492,182,682	482,715,660	492,182,682	482,715,660
Others		35,461,769	50,809,869	250,713,778	237,817,480
Total revenues		11,481,589,292	14,322,561,181	10,658,800,980	13,204,493,197
Expenses					
Cost of expressway business		1,498,829,128	1,738,365,018	1,310,602,267	1,524,115,580
Cost of rail business		4,335,390,944	4,713,365,429	4,335,390,944	4,713,365,429
Cost of commercial development business		223,855,683	226,069,501	332,797,919	339,672,153
Amortisation on rights to operate completed expressway sectors and compensation for site acquisition cost	15	686,150,894	1,389,661,862	504,626,835	1,119,832,239
Amortisation on intangible asset under concession agreement of the MRT Blue Line Project	16	245,443,987	359,429,944	197,331,449	311,417,441
Selling expenses		91,863,188	169,847,473	37,074,946	95,023,623
Administrative expenses		1,068,048,787	1,176,670,273	993,062,770	1,094,579,751
Total expenses		8,149,582,611	9,773,409,500	7,710,887,130	9,198,006,216
Operating profit		3,332,006,681	4,549,151,681	2,947,913,850	4,006,486,981
Finance cost	31	(2,187,044,061)	(2,112,506,968)	(2,101,847,890)	(2,013,756,901)
Profit before income tax expenses		1,144,962,620	2,436,644,713	846,065,960	1,992,730,080
Income tax expenses	33	(133,911,711)	(381,919,095)	(74,203,093)	(294,796,464)
Profit for the year		1,011,050,909	2,054,725,618	771,862,867	1,697,933,616
Profit attributable to:					
Equity holders of the Company		1,010,097,493	2,051,090,045	771,862,867	1,697,933,616
Non-controlling interests of the subsidiaries		953,416	3,635,573		
		<u>1,011,050,909</u>	<u>2,054,725,618</u>		
Basic earnings per share					
Profit attributable to equity holders of the Company	34	0.07	0.13	0.05	0.11

The accompanying notes are an integral part of the financial statements.

STATEMENT OF COMPREHENSIVE INCOME

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of comprehensive income

For the year ended 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Profit for the year		<u>1,011,050,909</u>	<u>2,054,725,618</u>	<u>771,862,867</u>	<u>1,697,933,616</u>
Other comprehensive income					
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>					
Gain (loss) from cash flow hedges, net of income tax		<u>71,932,808</u>	<u>(58,489,304)</u>	<u>71,932,808</u>	<u>(58,489,304)</u>
Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of income tax		<u>71,932,808</u>	<u>(58,489,304)</u>	<u>71,932,808</u>	<u>(58,489,304)</u>
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>					
Gain (loss) on investments in equity designated at fair value through other comprehensive income, net of income tax		<u>55,349,674</u>	<u>(1,359,788,928)</u>	<u>55,349,674</u>	<u>(1,359,788,928)</u>
Actuarial gain, net of income tax	25	<u>178,424,063</u>	<u>26,618,808</u>	<u>173,600,711</u>	<u>26,618,808</u>
Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax		<u>233,773,737</u>	<u>(1,333,170,120)</u>	<u>228,950,385</u>	<u>(1,333,170,120)</u>
Other comprehensive income for the year		<u>305,706,545</u>	<u>(1,391,659,424)</u>	<u>300,883,193</u>	<u>(1,391,659,424)</u>
Total comprehensive income for the year		<u>1,316,757,454</u>	<u>663,066,194</u>	<u>1,072,746,060</u>	<u>306,274,192</u>
Total comprehensive income attributable to:					
Equity holders of the Company		<u>1,315,788,120</u>	<u>659,430,621</u>	<u>1,072,746,060</u>	<u>306,274,192</u>
Non-controlling interests of the subsidiaries		<u>969,334</u>	<u>3,635,573</u>		
		<u>1,316,757,454</u>	<u>663,066,194</u>		

The accompanying notes are an integral part of the financial statements.

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

For the year ended 31 December 2021

	Consolidated financial statements										(Unit: Baht)
	Equity attributable to the shareholders of the Company										
	Issued and paid-up share capital	Premium on ordinary shares	Capital deficit from change in shareholding in subsidiaries	Other components of shareholders' equity				Total equity attributable to shareholders of the Company	Equity attributable to non-controlling interests of the subsidiaries	Total shareholders' equity	
Retained earnings - Appropriated - statutory reserve				Unappropriated - statutory reserve	Cash flow hedge reserve	Fair value reserve	Total other components of shareholders' equity				
Balance as at 1 January 2020	15,285,000,000	5,816,938,084	(256,942,521)	1,379,090,000	14,955,443,234	(90,148,139)	1,625,936,436	1,535,788,297	38,715,317,094	42,461,657	38,757,778,751
Profit for the year	-	-	-	2,051,090,045	2,051,090,045	-	-	-	2,051,090,045	3,635,573	2,054,725,618
Other comprehensive income for the year	-	-	-	26,618,808	(26,618,808)	(58,489,304)	(1,359,788,928)	(1,418,278,232)	(1,391,659,424)	-	(1,391,659,424)
Total comprehensive income for the year	-	-	-	2,077,708,853	(2,077,708,853)	(58,489,304)	(1,359,788,928)	(1,418,278,232)	659,430,621	3,635,573	663,066,194
Investment in subsidiary (Note 12)	-	-	(7,698,644)	-	-	-	-	-	(7,698,644)	(3,771,669)	(11,470,313)
Transferred to statutory reserve (Note 26)	-	-	-	84,910,000	(84,910,000)	-	-	-	-	-	-
Dividend paid (Note 35)	-	-	-	-	(1,375,650,000)	-	-	-	(1,375,650,000)	-	(1,375,650,000)
Balance as at 31 December 2020	15,285,000,000	5,816,938,084	(264,641,165)	1,464,000,000	15,572,592,087	(148,637,443)	266,147,508	117,510,065	37,991,399,071	42,325,561	38,033,724,632
Balance as at 1 January 2021	15,285,000,000	5,816,938,084	(264,641,165)	1,464,000,000	15,572,592,087	(148,637,443)	266,147,508	117,510,065	37,991,399,071	42,325,561	38,033,724,632
Profit for the year	-	-	-	-	1,010,097,493	-	-	-	1,010,097,493	953,416	1,011,050,909
Other comprehensive income for the year	-	-	-	178,408,145	(178,408,145)	71,932,808	55,349,674	127,282,482	305,690,627	15,918	305,706,545
Total comprehensive income for the year	-	-	-	-	1,188,505,638	71,932,808	55,349,674	127,282,482	1,315,788,120	969,334	1,316,757,454
Investment in subsidiary (Note 12)	-	-	(81,405,129)	-	-	-	-	-	(81,405,129)	(41,744,558)	(123,149,687)
Transferred to statutory reserve (Note 26)	-	-	-	38,600,000	(38,600,000)	-	-	-	-	-	-
Dividend paid (Note 35)	-	-	-	-	(1,528,500,000)	-	-	-	(1,528,500,000)	-	(1,528,500,000)
Balance as at 31 December 2021	15,285,000,000	5,816,938,084	(346,046,294)	1,502,600,000	15,193,997,725	(76,704,635)	321,497,182	244,792,547	37,697,282,062	1,550,337	37,698,832,399

The accompanying notes are an integral part of the financial statements.

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

For the year ended 31 December 2021

	Separate financial statements										(Unit: Baht)
	Retained earnings					Other components of shareholders' equity					
	Issued and paid-up share capital	Premium on ordinary shares	Appropriated - statutory reserve	Unappropriated reserve	Cash flow hedge reserve	Fair value reserve	Total other components of shareholders' equity	Total shareholders' equity			
Balance as at 1 January 2020	15,285,000,000	5,816,938,084	1,379,090,000	7,387,658,930	(90,148,139)	7,814,325,243	7,724,177,104	37,592,864,118			
Profit for the year	-	-	-	1,697,933,616	-	-	-	1,697,933,616			
Other comprehensive income for the year	-	-	-	26,618,808	(58,489,304)	(1,359,788,928)	(1,418,278,232)	(1,391,659,424)			
Total comprehensive income for the year	-	-	-	1,724,552,424	(58,489,304)	(1,359,788,928)	(1,418,278,232)	306,274,192			
Transferred to statutory reserve (Note 26)	-	-	84,910,000	(84,910,000)	-	-	-	-			
Dividend paid (Note 35)	-	-	-	(1,375,650,000)	-	-	-	(1,375,650,000)			
Balance as at 31 December 2020	15,285,000,000	5,816,938,084	1,464,000,000	7,651,651,354	(148,637,443)	6,454,536,315	6,305,898,872	36,523,488,310			
Balance as at 1 January 2021	15,285,000,000	5,816,938,084	1,464,000,000	7,651,651,354	(148,637,443)	6,454,536,315	6,305,898,872	36,523,488,310			
Profit for the year	-	-	-	771,862,867	-	-	-	771,862,867			
Other comprehensive income for the year	-	-	-	173,600,711	71,932,808	55,349,674	127,282,482	300,883,193			
Total comprehensive income for the year	-	-	-	945,463,578	71,932,808	55,349,674	127,282,482	1,072,746,060			
Transferred to statutory reserve (Note 26)	-	-	38,600,000	(38,600,000)	-	-	-	-			
Dividend paid (Note 35)	-	-	-	(1,528,500,000)	-	-	-	(1,528,500,000)			
Balance as at 31 December 2021	15,285,000,000	5,816,938,084	1,502,600,000	7,030,014,932	(76,704,635)	6,509,885,989	6,433,181,354	36,067,734,370			

The accompanying notes are an integral part of the financial statements.

CASH FLOW STATEMENT

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Cash flow statement

For the year ended 31 December 2021

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
Cash flows from operating activities				
Profit before tax	1,144,962,620	2,436,644,713	846,065,960	1,992,730,080
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Amortisation and depreciation	1,128,606,378	1,857,979,562	864,000,911	1,504,206,025
Allowance for expected credit losses (reversal)	2,809,203	(548,274)	2,305,818	389,846
Revenue recognition of unearned revenue from advertising management rights	-	-	(1,248,360)	(1,248,360)
Withholding tax deducted at source written off	1,060,664	605,265	-	-
Gain on sale of investments in financial assets	-	(3,530,367)	-	(3,364,485)
Gain on fair value adjustments of financial assets	(4,395,586)	(14,508,454)	(4,395,586)	(14,395,453)
Gain on disposal/write-off of equipment, intangible assets and right-of-use asset	(6,071,738)	(2,876,113)	(6,100,477)	(2,875,367)
Project remuneration expense	220,635,284	350,690,055	220,635,284	350,690,055
Compensation for site acquisition cost	-	61,467,080	-	61,467,080
Provision for long-term employee benefits	93,139,079	109,639,862	88,678,311	105,479,749
Unrealised (gain) loss on exchange rate	(283,854)	22,541	(283,854)	22,541
Effectuated of reduction in rental expenses	(3,381,343)	(19,715)	(65,488)	(23,705)
Interest income	(227,222,451)	(296,044,829)	(225,696,287)	(295,071,557)
Dividend income	(492,182,682)	(482,715,660)	(492,182,682)	(482,715,660)
Interest expenses	2,163,893,619	2,080,911,700	2,079,408,674	1,982,968,396
Profit from operating activities before changes in operating assets and liabilities	4,021,569,193	6,097,717,366	3,371,122,224	5,198,259,185
Operating assets (increase) decrease				
Bank deposit for unearned fare box revenue	(714,335)	(18,789,610)	(714,335)	(18,789,610)
Trade and other receivables	106,486,620	(55,567,070)	69,254,207	(27,843,277)
Receivable under the concession agreement	1,649,683,274	1,649,683,274	1,649,683,274	1,649,683,274
Other current assets	(42,050,038)	12,089,492	(40,886,213)	15,659,000
Other non-current assets	(2,232,967)	11,443,912	(1,390,114)	4,267,146
Cash paid for project remuneration	(2,679,657,407)	(2,559,221,912)	(2,679,657,407)	(2,559,221,912)
Operating liabilities increase (decrease)				
Trade and other payables	(186,562,594)	157,100,847	(254,182,507)	192,259,854
Unearned fare box revenue	(6,404,631)	16,055,838	(6,404,631)	16,055,838
Deposits on stored value ticket	(1,159,600)	7,780,700	(1,159,600)	7,780,700
Other current liabilities	14,230,241	(41,394,911)	12,227,398	(43,248,315)
Other non-current liabilities	(4,768,722)	11,563,379	(4,617,708)	10,966,408
Cash paid for long-term employee benefits	(31,543,409)	(36,876,553)	(31,543,409)	(36,876,553)
Net cash flows from operating activities	2,836,875,625	5,251,584,752	2,081,731,179	4,408,951,738
Cash received from interest income	227,222,838	296,045,709	225,696,626	294,675,868
Cash paid for income tax	(194,699,585)	(196,270,863)	(115,868,135)	(125,377,096)
Net cash flows from operating activities	2,869,398,878	5,351,359,598	2,191,559,670	4,578,250,510

The accompanying notes are an integral part of the financial statements.

CASH FLOW STATEMENT (Continued)

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Cash flow statement (continued)

For the year ended 31 December 2021

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
Cash flows from investing activities				
Cash received from sales of financial assets designated at FVTPL	-	3,904,702,827	-	3,554,887,078
Cash paid for purchase of financial assets designated at FVTPL	-	(3,492,504,112)	-	(3,164,155,634)
Cash received from sale of financial assets designated at FVOCI	-	2,310,374	-	2,310,374
Cash paid for purchase of financial assets designated at FVOCI	-	(526,342,927)	-	(526,342,927)
Cash paid for purchase of investments in subsidiary	(123,149,687)	(11,470,313)	(123,149,687)	(11,470,313)
Cash received from long-term loans to related party	-	-	-	37,000,000
Cash received from sales of equipment and right-of-use asset	7,848,476	5,355,862	7,848,476	5,355,115
Purchase of equipment	(87,435,912)	(127,506,633)	(80,109,505)	(118,223,608)
Cash received from interest income	-	-	-	396,459
Cash received from dividend income	492,182,682	482,715,660	492,182,682	482,715,660
Cash paid for the improvement of expressway	(845,461,302)	(827,337,637)	(733,058,659)	(824,517,416)
Cash paid for intangible asset under concession agreement of the MRT Blue Line Project	(1,102,154,189)	(2,987,424,067)	(1,088,137,240)	(2,972,884,669)
Cash paid for project cost of the MRT Chalong Ratchadham Line	(61,270,758)	(39,120,693)	(61,270,758)	(39,120,693)
Interest expenses capitalised as cost of projects	-	(90,275,175)	-	(90,275,175)
Increase in other intangible assets	(11,515,081)	(17,419,060)	(11,494,081)	(15,440,960)
Net cash flows used in investing activities	(1,730,955,771)	(3,724,315,894)	(1,597,188,772)	(3,679,766,709)
Cash flows from financing activities				
Cash received form short-term loan from financial institution	5,200,000,000	9,300,000,000	5,200,000,000	9,300,000,000
Repayment of short-term loans from financial institution	(6,200,000,000)	(9,550,000,000)	(6,200,000,000)	(9,550,000,000)
Cash received from long-term loans from financial institutions	5,000,000,000	5,299,998,000	5,000,000,000	5,299,998,000
Repayment of long-term loans from financial institutions	(3,403,941,069)	(2,853,940,069)	(3,091,761,069)	(2,541,760,069)
Cash payment for lease liabilities	(67,283,541)	(44,427,542)	(47,488,832)	(26,254,320)
Cash received from debentures	6,000,000,000	3,000,000,000	6,000,000,000	3,000,000,000
Cash paid for redemption of debentures	(4,615,000,000)	(2,500,000,000)	(4,615,000,000)	(2,500,000,000)
Cash paid for financial fees	(25,042,356)	(8,815,078)	(25,042,356)	(8,815,078)
Interest paid	(1,980,892,338)	(1,984,375,214)	(1,904,696,102)	(1,890,616,670)
Dividend paid	(1,528,500,000)	(1,375,650,000)	(1,528,500,000)	(1,375,650,000)
Net cash flows used in financing activities	(1,620,659,304)	(717,209,903)	(1,212,488,359)	(293,098,137)
Net increase (decrease) in cash and cash equivalents	(482,216,197)	909,833,801	(618,117,461)	605,385,664
Cash and cash equivalents at beginning of year	1,613,584,108	703,750,307	1,214,091,489	608,705,825
Cash and cash equivalents at end of year	1,131,367,911	1,613,584,108	595,974,028	1,214,091,489

Supplemental cash flows information

Non-cash items consist of:

Increase in other payable from acquisition of equipment	966,134	20,126,650	672,774	20,126,650
Increase in payable from cost of expressway improvement	55,179,489	-	47,976,289	-
Increase in payable from the MRT Chalong Ratchadham Line	16,430,973	-	16,430,973	-
Increase in right-of-use assets from lease liabilities	119,270,679	38,106,955	38,357,588	35,658,330

The accompanying notes are an integral part of the financial statements.

Bangkok Expressway and Metro Public Company Limited and its subsidiaries

Notes to consolidated financial statements

For the year ended 31 December 2021

1. General information

1.1 Corporate information

Bangkok Expressway and Metro Public Company Limited (“the Company”) is a public company incorporated from an amalgamation on 30 December 2015 and domiciled in Thailand. The Company’s major shareholder is the CH. Karnchang Public Company Limited, which is a public company incorporated in Thailand. The registered office of the Company is at 587 Sutthisarn Road, Ratchacaphisek Subdistrict, Dindaeng District, Bangkok. The Company has four branches.

The Company is principally engaged in the construction and management of expressways, the operation of metro services and commercial development. Details are as follows:

A. Construction and management of expressways

The Group has been granted concessions by the Expressway Authority of Thailand (“EXAT”) for the construction and management of expressways, as follows:

A.1 The Si Rat Expressway under the Second Stage Expressway agreement (Sector A, Sector B and Sector C) and the Extension of the Second Stage Expressway agreement (Sector D).

The Company, as a concessionaire, invested in the design, construction and management of expressways. These consists of 4 sectors: Sector A (Rama IX-Ratchadapisek), Sector B (Phayathai-Bangkhlo), Sector C (Ratchadapisek-Chaeng Watthana) and Sector D (Rama IX-Srinagarindra). The concession periods are 30 years commencing on 1 March 1990 for Sector A, Sector B and Sector C, and on 17 April 1997 for Sector D. The EXAT has the rights to collect all toll revenues and is to compensate the Company in the form of toll revenue sharing at the rates specified in the concession agreement, throughout the concession period. The Company has the rights to extend the concession for two further periods of 10 years each, depending upon terms and conditions that are to be agreed between the parties.

On 20 February 2020, the Company and EXAT signed the Second Stage Expressway Agreement (Amendment). The Company was granted extensions to 31 October 2035 of the terms of the existing agreements for both the Second Stage Expressway agreement (Sector A, Sector B and Sector C), which was to end on 29 February 2020, and the Extension of the Second Stage Expressway agreement (Sector D), which was to end on 21 April 2027. In addition, the Company retains all rights to extend the concessions specified in the existing agreements. The remaining periods of the existing agreements are 4 years and 4 months for the Second Stage Expressway agreement and 11 years and 6 months for the Extension of the Second Stage Expressway agreement (Sector D), commencing from the end of the amended agreements. The toll rates are to be increased every 10 years by fixed amounts specified in the agreements, commencing from 1 September 2018.

- A.2 The Si Rat - Outer Ring Road Expressway Project, under a concession agreement in respect of the investment, design, construction, management, operation and maintenance.

The Company, as concessionaire, invested in the design, construction, management, operation and maintenance of the Si Rat - Outer Ring Road Expressway Project, and is also responsible for expressway operation expenses throughout the concession period, which is for 30 years commencing on 15 December 2012. The Company has the rights to collect all toll revenue and all other related income, and the Company agreed in the concession agreement to share toll revenues receive to the EXAT, throughout the concession period.

The Si Rat - Outer Ring Road Expressway started operation on 22 August 2016.

- A.3 The Udon Rattaya Expressway Project under the Bang Pa-In - Pak Kret Expressway Agreement in respect of the construction and management of the expressway project of a subsidiary.

The Subsidiary, as concessionaire, invested in the design, construction and management of the expressway, together with related business under a 30-year concession commencing on 27 September 1996. The EXAT has the rights to collect all toll revenue and is to compensate the Subsidiary in the form of revenue sharing at the rates specified in the concession agreement, throughout the concession period. The Subsidiary has the rights to extend the concession for two further periods of 10 years each, depending upon terms and conditions that are to be agreed between the parties.

On 20 February 2020, the subsidiary and EXAT signed the Bang Pa-In - Pak Kret Expressway Project Agreement (Amendment). The Subsidiary received an extension of the term of the existing agreement, which was to end on 26 September 2026, to 31 October 2035. The Subsidiary retains all rights to extend the concession specified in the existing agreement, of which the remaining period is 10 years and 11 months commencing from the end of the amended agreements. The toll rates are to be increased every 10 years by fixed amounts specified in the agreements, commencing from 1 November 2018.

B. Operation of metro services

The Company received concessions from the Mass Rapid Transit Authority of Thailand (“MRTA”) to operate metro services, as follows:

B.1 The MRT Blue Line Project.

The Company, as concessionaire of the MRTA Initial System Project - Chaloe Ratchamongkhon Line (The MRT Blue Line: Hua Lamphong Station - Bang Sue Station) under the MRTA Initial System Project - Chaloe Ratchamongkhon Line, invested in M&E Equipment and is to operate and maintain the MRTA Initial System for a concession period of 25 years, commencing on 2 July 2004.

On 31 March 2017, the Company signed the MRT Blue Line Concession Agreement for a concession period of approximately 33 years under the Build, Transfer and Operate basis, with the MRTA. The MRT Blue Line Project consists of the MRTA Initial System Project - Chaloe Ratchamongkhon Line: Hua Lamphong Station-Bang Sue Station and the MRT Blue Line Extension: Hua Lamphong Station-Lak Song Station and Bang Sue Station-Tha Phra Station.

Under the MRT Blue Line Concession Agreement, a concession agreement with the MRTA for the MRTA Initial System Project - Chaloe Ratchamongkhon Line is deemed to be part of the MRT Blue Line Concession Agreement, and only the clauses relating the rights, duties and provisions with respect to fares, fare rates and payment of remuneration to the MRTA will remain in effect until the end of the concession agreement with the MRTA for the MRTA Initial System Project - Chaloe Ratchamongkhon Line.

The Company, as concessionaire of the MRT Blue Line Concession Agreement is responsible for the supply, installation and testing of the M&E Systems of the MRT Blue Line Extension Project (Phase 1 of the concession, which has a terms of 36 months) and operation of the Through Operation systems of the MRT Blue Line Project (Phase 2 of the concession, which has a term of 30 years from the commencement date of the revenue-generating service on all sectors). The Company has rights, duties and obligations to claim, collect, and retain all fares, and to generate

revenue from commercial development, and is responsible for all investment, payment of operating costs, and payment of remuneration to the MRTA in accordance with the Concession.

The Company is required to gradually commence operation of the MRT Blue Line Extension Project in 3 sectors.

Sector 1: Bang Sue Station-Tao Poon Station within 15 August 2017.

Sector 2: Hua Lamphong Station-Lak Song Station within 30 months.

Sector 3: Tao Poon Station-Tha Phra Station within 36 months.

On 30 March 2020, the Company officially commenced commercial operation of the MRT Blue Line Project: Tao Poon Station-Tha Phra Station. As a result, the Company commenced operation and revenue-generating service of the Through Operation systems of the MRT Blue Line Project in accordance with the MRT Blue Line Concession Agreement. The MRT Blue Line Concession Agreement has a term of 30 years from the commencement date of the revenue-generating service on all sectors (30 March 2020).

- B.2 The MRT Chalong Ratchadham Line Project (Bang Yai-Rat Burana, Bang Yai-Bang Sue Section (Klong Bang Phai Station-Tao Poon Station)) (the "MRT Purple Line Project") Contract 4: Concession for Supply of M&E Systems and O&M Services.

The Company, as concessionaire, invested in the M&E Systems and rolling stock. In addition, the Company provides operation and maintenance services. The MRTA has the rights to collect fare box revenues and commercial revenues from the use of all civil infrastructure and the M&E Systems, and is to compensate the Company in the form of M&E Systems equipment costs (Phase I) and operation and maintenance service fees (Phase II). Details are as below:

Phase I: Design and Build

The Company is to design, supply, install and test the M&E Systems. In return the Company is to receive remuneration and interest totaling Baht 20,011 million from the MRTA in the form of monthly payments over a period of 10 years, beginning from the date of the Commissioning Certificate.

On 6 August 2016, the Company delivered the M&E Systems and Rolling Stocks under Phase 1 of the concession agreement to the MRTA and recorded amounts receivable from the MRTA under the account of receivable under the concession agreement, as described in Note 10 to the financial statements.

Phase II: O&M services

The Company is responsible for the operation of metro services, including repair, maintenance and improvement of all equipment and materials related to the civil infrastructure works and M&E Systems from the date specified in the Commissioning Certificate until the end of the concession period. In addition, the Company shall transfer rights of civil infrastructure and M&E Systems to the MRTA when the concession agreement ends. The compensation for Phase II under the agreement, amounting to approximately Baht 57,208 million (excluding escalations for inflation and adjustments to reflect electricity prices), will be paid to the Company on a monthly basis until the expiration of the concession agreement (3 September 2043).

On 6 August 2016, the Company is delivered the operating civil infrastructure and M&E Systems equipment of the MRT Chalong Ratchadham Line from the MRTA.

On that day, the operation of the MRT Chalong Ratchadham Line Project officially started.

- C. Commercial development business, which consists of commercial developments related to the expressways and the operation of metro services.

On 1 October 2018, the Company and Bangkok Metro Network Limited (a subsidiary company) agreed to terminate and replace the amendment to the commercial development rights agreement dated 11 March 2015, and terminate the contract granting commercial development rights to manage advertising services through the Passenger Information Display System (PIDs) dated 1 January 2010. Under the agreements, the Company transferred the commercial development rights to provide services relating to the MRTA Initial System Project - Chaloem Ratchamongkhon Line and to manage advertising services through PIDs in the MRTA Initial System Project - Chaloem Ratchamongkhon Line to the subsidiary. It also had the rights to receive commercial development revenue and share the revenue with the Company at the rates specified in the agreement. On the same day, the Company and the subsidiary entered into a management agreement for commercial development of the MRT Blue Line Project (the MRTA Initial System Project - Chaloem Ratchamongkhon Line and the MRT Blue Line Extension Project). Under this agreement, the Company authorised the subsidiary to act on its behalf in managing commercial development and advertising services through the Passenger Information Display System (PIDs) for the MRT Blue Line Project. The contract will expire in July 2029, and the Company is to pay a management fee to the subsidiary based on the specified rate. Therefore, for the period from 1 October 2018, the Company has recorded revenue and expenses relating to commercial development of the MRT Blue Line Project in profit or loss of the Company.

1.2 Coronavirus disease 2019 Pandemic

The Coronavirus disease 2019 pandemic is adversely impacting various businesses and industries. This situation significantly affects the Group's business activities in terms of commuter numbers on both the expressway and metro systems and this significantly impacts the Group's revenue while opening hours are reduced and organisations are supporting work from home policies. The Group's management has continuously monitored ongoing developments and assessed the financial impact and has used estimates and judgement in respect of various issues as the situation has evolved.

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Profession Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of Bangkok Expressway and Metro Public Company Limited ("the Company") and its subsidiaries ("the subsidiaries"). Details are as follows:

Company's name	Nature of business	Country of incorporation	Proportion of Shareholding	
			<u>2021</u> (Percent)	<u>2020</u> (Percent)
Northern Bangkok Expressway Company Limited	Operation and management of Bang Pa-In - Pak Kret Expressway project	Thailand	99.99	99.99
Bangkok Metro Networks Limited	Management on commercial development of the MRT project and Expressway	Thailand	99.67	90.52

As described in Note 12 to the financial statements, the Company made an additional investment in 9.15 percent of the issued and fully paid up share capital of Bangkok Metro Network Limited in May 2021.

- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
 - c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
 - d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
 - e) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.
 - f) Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.
- 2.3 The separate financial statements, which present investment in subsidiaries presented under the cost method.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards and interpretations which are effective for fiscal years beginning on or after 1 January 2021. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

However, the Group has adopted the temporary exemptions from applying specific hedge accounting requirements in accordance with TFRS 9, *Financial Instruments*, and TFRS 7, *Disclosure of Financial Instruments*, which apply to all hedging relationships directly affected by interest rate benchmark reform. Consequently, the Group can continue to apply hedge accounting for those hedging relationships in the period when there is uncertainty about the timing or the amount of interest rate benchmark-based cash flows of the hedged item or of the hedging instrument.

The adoption of these temporary exemptions does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2022

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2022. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and, for some standards, providing temporary reliefs or temporary exemptions for users.

The management of the Group is currently evaluating the impact of these standards on the financial statements in the year when they are adopted.

4. Significant accounting policies

4.1 Revenue and expense recognition

a) Toll revenue recognition

Toll revenue represent the invoiced value, excluding value added tax, at a point in time upon completion of the service.

b) Toll revenue sharing recognition

Toll revenue sharing represent the invoiced value, excluding value added tax, on accrual basis.

c) Fare box revenue recognition

Smart card and smart token sales are recognised as revenue at a point in time upon completion of the service. Prepaid value in stored value smart cards is recorded as unearned fare box revenue in current liabilities in the statement of financial position.

d) Revenue recognition from provision of operating services

Revenue from provision of operating services is recognised over time when services have been rendered, excluding value added tax. Service rate charged is in accordance with rates stipulated in the agreement.

e) Revenue recognition from commercial development revenue

Commercial development revenue is recognised over time when services have been rendered.

f) Other revenues and expenses recognition**Interest income**

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

Interest income from receivable under the concession agreement is realised over the installment period using the effective interest rate method. Interest income is recognised when installments come due, regardless of whether collection is made, and is presented under interest income in profit and loss.

Finance cost

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognised on an accrual basis.

Dividends

Dividends are recognised when the rights to receive the dividends is established.

Other expenses

Expenses are recognised on accrual basis.

4.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and cash at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

4.3 Investments in subsidiaries

Investments in subsidiaries are accounted for in the separate financial statements using the cost method.

4.4 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at cost less accumulated depreciation and allowance for loss on impairment (if any).

No depreciation has been provided for land awaiting sales.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.

4.5 Building and equipment and depreciation

Building and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of building and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

Building and construction improvement	5 years, 20 years
Furniture, fixture and equipment	3 - 5 years
Vehicles	5 - 16 years

Depreciation is included in determining income. No depreciation has been provided for assets under installations.

An item of building and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.6 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.7 Amortisation of rights to operate expressway sectors and amortisation

Rights to operate expressway sectors represent the cost of construction of the Second Stage Expressway System, the Si Rat - Outer Ring Road Expressway and the Bang Pa-In - Pak Kret Expressway. It is stated at cost less accumulated amortisation and allowance for loss on impairment (if any).

The rights to operate completed expressway sectors are amortised as expenses in income statements with the unit of throughput method over the concession period as follows:

Amortisation for the year = Net rights to operate expressway sectors x Percentage of the number of vehicle volume for the year

Percentage of the number of vehicles volume for the year =
$$\frac{\text{Current year's number of actual vehicle volume}}{(\text{Current year's number of actual vehicle volume} + \text{Projected vehicle volume for the remaining years of the agreement})}$$

Equipment to operate expressway sectors purchased during the concession period and having a limited useful life is depreciated on a straight-line basis over the estimated useful life or residual life of the concession period, whichever is less, as follows:

Toll collection system equipment and traffic management system equipment	7 years and concession period
Other equipment	5 years, 15 years and concession period

Amortisation of the expressway sectors is included in profit or loss. No amortisation is provided on assets under construction.

4.8 Rights to use sites for expressway and amortisation

The Company initially recorded the rights to use sites for expressway at cost, equal to the present value of future compensation for site acquisition cost to be paid to the EXAT under the Second Stage Expressway System agreement. Following initial recognition, the rights are carried at cost less accumulated amortisation and allowance for loss on impairment (if any).

The Company amortises the rights to use sites for expressway as an expense in the income statement is proportion to the number of actual vehicle volume. The Company reviews for impairment of the asset whenever there are indications of impairment and reviews the amortisation method at least once per year.

4.9 Intangible assets under concession agreement of the MRT Blue Line Project and amortisation

Intangible assets under concession agreement of the MRT Blue Line Project are stated at cost less accumulated amortisation and allowance for loss on impairment (if any).

The Group capitalised as assets all expenditures related to the MRT Blue Line Project, which including management and consultant fees, design costs, electrical and mechanical works and rolling stock purchased during the concession period, interest and other financing expenses. These will be amortised to expenses over the concession period after the commencement of operations.

Equipment - Metro system

The Company has been adopting the unit of throughput method to amortise such intangible assets, which related to equipment of metro system, over concession period of the MRT Blue Line Project and based on the following methodology:

Amortisation for the year = Net intangible assets under concession agreement of the MRT Blue Line Project
x Percentage of passengers for the year

Percentage of Passengers for the year =
$$\frac{\text{Current year's actual passengers}}{(\text{Actual passengers for the current year} + \text{Projected passengers through the remaining concession year})}$$

Equipment - Other system

Amortisation of intangible assets under the concession agreement of the MRT Blue Line Project related to other system such as station's equipment rental area improvement, telecommunication equipment at station, advertising equipment etc. is calculated by reference to its cost on the straight-line basis over the following estimated useful lives:

Electrical equipment and station's rental area improvement	5 years and concession period
Telecommunication equipment	5 years and concession period
Advertising equipment	5 - 7 years

Amortisation of intangible assets under concession agreement of the MRT Blue Line Project is included in profit or loss. No amortisation is provided on assets under installations.

4.10 Project cost of the MRT Chalong Ratchadham Line and amortisation

Project cost of the MRT Chalong Ratchadham Line is stated at cost less accumulated amortisation and allowance for loss on impairment (if any). The amortisation is calculated on the straight-line basis over the concession period.

The amortisation is included in profit or loss. No amortisation is provided on project cost under installations.

4.11 Prepaid project remuneration

The Company records remuneration expense of the MRT Blue Line Project in profit or loss for each year based on the proportion of projected remuneration to projected revenue under the concession agreement over the concession period. Differences between the remuneration that the Company pays to the MRTA and the recognised remuneration expenses are recorded under "prepaid project remuneration" in the statement of financial position.

The proportion of projected remuneration to projected revenue under the concession agreement of the MRT Blue Line Project is reviewed at least once a year.

4.12 Other intangible assets and amortisation

The Group is initially recognised intangible assets at cost. Following the initial recognition, the intangible assets are carried at cost less any accumulated amortisation and allowance for loss on impairment (if any).

Intangible assets with finite useful lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation is include in profit or loss.

The intangible assets with finite useful lives is computer software with 3 years, 5 years and 10 years useful lives.

4.13 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, and lease payments made at or before the commencement date of the lease, and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Building and construction improvement	3 - 6 years
Vehicles	5 years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate.

The Group discounted the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

4.14 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Group, whether directly or indirectly, or which are under common control with the Group.

They also include associates, and individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Group, key management personnel, directors and officers with authority in the planning and direction of the Group' operations.

4.15 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency.

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

4.16 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the building and equipment, right-of-use assets, investment properties and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of goodwill. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in profit or loss.

4.17 Employee benefits

Short-term employee benefits

The Group will recognise salaries, wages, bonuses and contributions to the social security fund as expenses when incurred.

Post-employment benefits

Defined contribution plans

The Group and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Group. The fund's assets are held in a separate trust fund and the contributions of the Group is recognised as expenses when incurred.

Defined benefit plans

The Group has obligations in respect of the severance payments they must make to employees upon retirement under labor law. The Group treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from post-employment benefits are recognised immediately in other comprehensive income.

4.18 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

4.19 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.20 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component, are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive income on these financial assets are never recycled to profit or loss.

Dividends are recognised as other income in profit or loss, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial assets designated at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value including interest income recognised in profit or loss.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any discounts or premiums on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in profit or loss.

Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in profit or loss.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

4.21 Derivatives and hedge accounting

The Group uses derivative which is an interest rate swaps to hedge its interest rate risks.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes including interest income are recognised in profit or loss unless the derivative is designated and effective as a hedging instrument under cash flow hedge. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Hedge accounting - Cash flow hedges

At the inception of a hedging relationship, the Group formally designates and documents the hedging relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation, at the inception of the hedge and on an ongoing basis, includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements, including analysis of the sources of hedge ineffectiveness and how the hedge ratio is determined.

A hedging relationship qualifies for hedge accounting if it meets all of the following hedge effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk is not the dominant factor in the value changes that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges that meet all of the qualifying criteria for hedge accounting are accounted for cash flow hedges. The effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in profit or loss. The cash flow hedge reserve is adjusted to the lower (in absolute amounts) of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The way cash flow hedge reserve accumulated in other comprehensive income are subsequently accounted for, depends on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the reserve accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and is not recognised in other comprehensive income for the period. For any other cash flow hedges, the reserve accumulated in other comprehensive income is subsequently reclassified to profit or loss as a reclassification adjustment in the same period which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the cash flow hedge reserve accumulated in other comprehensive income must remain in equity if the hedged future cash flows are still expected to occur. Otherwise, the reserve will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, the way the reserve remaining in equity is accounted for depends on the nature of the underlying transaction as described above.

4.22 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an observable active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Leases

Determining the lease term with extension and termination options - The Group as a lessee

In determining the lease term, the management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Estimating the incremental borrowing rate - The Group as a lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Fair value of financial instruments

In determining the fair value of financial instruments recognised in the statement of financial position that are not actively traded and for which quoted market prices are not readily available, the management exercise judgement, using a variety of valuation techniques and models. The input to these models is taken from observable markets, and includes credit risks for both bank and counter parties consideration of liquidity, correlation and longer-term volatility of financial instruments. Change in assumption which is related to calculating input, could affect fair value in financial statement and the disclosure of fair value hierarchy.

Impairment of investment in subsidiaries

The Company reviews impairment of investment in subsidiaries, which requires management to prepare projection of the cash flow expected to be generated by the investment in the future, and to choose a suitable discount rate in order to calculate the present value of those cash flows.

Building improvement and equipment/Depreciation

In determining depreciation of building improvement and equipment, the management is required to make estimates of the useful lives and residual values of the Company's building improvement and equipment and to review estimate useful lives and residual values when there are any changes.

In addition, the management is required to review building improvement and equipment for impairment on a periodical basis and record impairment losses in the period when it is determined that their recoverable amount is lower than the carrying amount. This requires judgements regarding forecast of future revenues and expenses relating to the assets subject to the review.

Amortisation of rights to operate completed expressway sectors and rights to use sites for expressway construction

In determining amortisation of rights to operate completed expressway sectors and rights to use sites for expressway construction, the management has to project vehicle volume after current year for the remaining years of the agreement. Vehicle volume is projected based on the number of vehicles as assessed by an independent appraiser, and adjusted by comparison to actual vehicle volume. However, the actual vehicle volume in the future could differ from the estimate depending upon changes in external factors that may affect toll rates and vehicle volume.

Amortisation of intangible asset under concession agreement of the MRT Blue Line Project

In determining amortisation of intangible asset under the concession agreement of the MRT Blue Line Project, the management has to project the number of passengers after current year for the remaining years of the agreement. Various assumptions needed to project by an accredited independent valuer, such as traffic model, network rail, average cost of fuel, and fare structure.

Deferred tax assets

Deferred tax assets are recognised for deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the temporary differences and losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of estimate future taxable profits.

Post-employment benefits under defined benefit plans

The obligation under the defined benefit plan is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

6. Related party transactions

During the year, the Group had significant business transactions with related parties. Such transactions arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Group and those related parties.

The relationship between the Company and the related parties which have transactions with during the year summarised below.

<u>Name of related parties</u>	<u>Relationship with the Company</u>
CH. Karnchang Public Company Limited	Major shareholders
Mass Rapid Transit Authority of Thailand	Shareholders
Northern Bangkok Expressway Company Limited	Subsidiary company
Bangkok Metro Networks Limited	Subsidiary company
TTW Public Company Limited	Related company through common directors of the Company
CK Power Public Company Limited	Related company through common directors of the Company
Bangpa-in Land Development Company Limited	Related company through common directors of the Company

Such significant transactions for the year ended 31 December 2021 and 2020 are summarised below.

(Unit: Million Baht)

	<u>Consolidated</u>		<u>Separate</u>		<u>Pricing policy</u>
	<u>financial statements</u>	<u>financial statements</u>	<u>financial statements</u>	<u>financial statements</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	
<u>Transactions with major shareholder</u>					
Cost of rail projects	137	1,991	137	1,991	Based on contracts
Cost of expressway improvement	827	814	758	814	Based on contracts
Expressway and civil works maintenance expenses	338	585	338	585	Based on contracts
Office rental and service expenses	9	9	-	-	Based on contracts
<u>Transactions with subsidiary companies</u>					
(eliminated from the consolidated financial statements)					
Commercial development revenue	-	-	3	3	Based on contracts
Project management income	-	-	228	209	Based on contract
Commercial development management fee	-	-	240	276	Based on contract

(Unit: Million Baht)

	Consolidated		Separate		Pricing policy
	financial statements		financial statements		
	2021	2020	2021	2020	
<u>Transactions with related companies</u>					
Interest income from M&E Systems	218	277	218	277	FDR plus stipulated margin per annum
Dividend income	492	483	492	483	As declared
Cost of commercial development	10	10	-	-	Based on contract
Remuneration from fare box (Inclusive of VAT)	203	332	203	332	Concession agreement
Remuneration from commercial development	18	19	18	19	Concession agreement
Property tax	3	3	3	2	At the rates charged by Bangkok Metropolitan Administration
Utility expenses	2	2	2	2	Based on contract

As at 31 December 2021 and 2020, the balances of the accounts between the Group and related parties are as follows:

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
<u>Trade and other receivables (Note 9)</u>				
<u>Trade receivables</u>				
Bangkok Metro Networks Limited	-	-	220	1,271
Mass Rapid Transit Authority of Thailand	356,058	349,988	356,058	349,988
Total	356,058	349,988	356,278	351,259
<u>Other receivables</u>				
Northern Bangkok Expressway Company Limited	-	-	20,330	19,795
Bangkok Metro Networks Limited	-	-	-	11
Total	-	-	20,330	19,806
<u>Guarantees for rental</u>				
CH. Karnchang Public Company Limited	1,914	1,914	-	-
<u>Advance payment under service contract</u>				
CH. Karnchang Public Company Limited	37,611	10,829	35,036	10,829
<u>Receivable under the concession agreement (Note 10)</u>				
Mass Rapid Transit Authority of Thailand	7,561,049	9,210,732	7,561,049	9,210,732
<u>Prepaid project remuneration</u>				
Mass Rapid Transit Authority of Thailand	9,775,518	7,307,905	9,775,518	7,307,905

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
<u>Trade and other payables (Note 20)</u>				
Bangkok Metro Networks Limited	-	-	21,443	123,240
CH. Karnchang Public Company Limited	85,757	401,750	79,667	401,645
Mass Rapid Transit Authority of Thailand	234,105	224,992	234,105	224,992
Others	324	320	320	320
Total	<u>320,186</u>	<u>627,062</u>	<u>335,535</u>	<u>750,197</u>
<u>Retention guarantees</u>				
CH. Karnchang Public Company Limited	<u>87,990</u>	<u>50,783</u>	<u>84,862</u>	<u>50,783</u>
<u>Guarantees for rental</u>				
Bangkok Metro Networks Limited	<u>-</u>	<u>-</u>	<u>723</u>	<u>903</u>
<u>Unearned revenue from advertising management rights (Note 23)</u>				
Bangkok Metro Networks Limited	<u>-</u>	<u>-</u>	<u>9,369</u>	<u>10,618</u>

Directors and management's remuneration

During the years ended 31 December 2021 and 2020, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	Short-term employee benefits	106,457	157,588	90,435
Post-employment benefits	<u>7,300</u>	<u>9,694</u>	<u>6,448</u>	<u>8,556</u>
Total	<u>113,757</u>	<u>167,282</u>	<u>96,883</u>	<u>145,768</u>

7. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	Cash	39,732	46,566	36,435
Bank deposits	<u>1,091,636</u>	<u>1,567,018</u>	<u>559,539</u>	<u>1,171,008</u>
Total	<u>1,131,368</u>	<u>1,613,584</u>	<u>595,974</u>	<u>1,214,091</u>

The Company has pledged the bank accounts used to deposit moneys received for work on the MRT Chalong Ratchadham Line Project (Note 10) and transferred rights to debit or withdraw from the deposit accounts used to make payment of loans and related financial fees to a group of lenders to secure the Company's loan, as described in Note 21 to the financial statements.

As at 31 December 2021, the balance of the pledged bank account amounted to Baht 1,029 (2020: Baht 1,028).

8. Bank deposit for unearned fare box revenue

This bank account is a reserve account set aside in compliance with the Notification of the Bank of Thailand applicable to electronic card businesses. These funds cannot be used for any purpose other than making payment for fare box revenue.

9. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
<u>Trade receivables</u>				
Trade receivables				
- Related parties (Note 6)	356,058	349,988	356,278	351,259
- Unrelated parties	112,043	165,407	93,550	134,225
Less: Allowance for expected credit losses	(3,199)	(390)	(2,696)	(390)
Total trade receivables - net	464,902	515,005	447,132	485,094
<u>Other receivables</u>				
Other receivables				
- Related parties (Note 6)	-	-	20,330	19,795
- Unrelated parties	2,263	29,098	1,934	3,690
Accrued income				
- Related parties (Note 6)	-	-	-	11
- Unrelated parties	6,087	4,800	5,439	4,161
Total other receivables	8,350	33,898	27,703	27,657
Trade and other receivables - net	473,252	548,903	474,835	512,751

Most of the trade receivables of the Group was within their credit terms or past due up to 3 months. As at 31 December 2021, the outstanding balances of trade receivables in the consolidated and separate financial statements that are one year past due amounted to approximately Baht 1.1 million and Baht 0.8 million, respectively (2020: consolidated financial statement: Baht 0.3 million, Separate financial statements: Nil).

Set out below is the movement in the allowance for expected credit losses of trade receivables.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Beginning balance	390	938	390	-
Provision for expected credit losses	2,809	390	2,306	390
Amount written off	-	(938)	-	-
Ending balance	<u>3,199</u>	<u>390</u>	<u>2,696</u>	<u>390</u>

10. Receivable under the concession agreement

	(Unit: Thousand Baht)	
	Consolidated and	
	Separate financial statements	
	<u>2021</u>	<u>2020</u>
Net book value at the beginning of the year	9,210,732	10,860,415
Collection	(1,649,683)	(1,649,683)
Net book value at the end of the year	<u>7,561,049</u>	<u>9,210,732</u>
Current	1,649,683	1,649,683
Non-current	5,911,366	7,561,049
Total receivable under the concession agreement	<u>7,561,049</u>	<u>9,210,732</u>

Receivable under the concession agreement is a receivable for M&E Systems (Inclusive of VAT) of Phase 1 of the MRT Chalong Ratchadham Line Project as described in Note 1.1 B.2 to the financial statements. The MRTA will pay the remuneration and interest in the form of monthly installments until 2026. The Company transferred rights to receive cash from receivable under the concession agreement to the group of lenders, in settlement of long-term loans from financial institutions, as described in Notes 21.2 and 21.3 to the financial statements.

As at 31 December 2021, there are no receivable under the concession agreement that are due in over 5 years.

Interest income for M&E Systems for the year end 31 December 2021 amounted to Baht 218 million (2020: Baht 277 million).

11. Other financial assets

	(Unit: Thousand Baht)	
	Consolidated and Separate financial statements	
	<u>2021</u>	<u>2020</u>
<u>Equity instruments designated at FVOCI</u>		
Equity instruments of listed companies		
- CK Power Public Company Limited	7,148,954	6,376,867
- TTW Public Company Limited	8,326,970	9,063,870
Equity instruments of non-listed company		
- Asia Era One Company Limited (formerly known as: Eastern High-Speed Rail Linking Three Airports Company Limited)	434,000	400,000
Total	15,909,924	15,840,737
<u>Financial assets at FVTPL</u>		
- Unit trust	765,671	761,275
Total	765,671	761,275
Total other financial assets - net	16,675,595	16,602,012
Current	765,671	761,275
Non-current	15,909,924	15,840,737
Total other financial assets	16,675,595	16,602,012

Equity instruments designated at FVOCI include listed and non-listed equity investments which the Group considers these investments to be strategic in nature.

During the year, the 2021 Annual General Meeting of the Asia Era One Company Limited's shareholders passed a special resolution to increase its registered share capital from Baht 4,000 million to Baht 7,780 million, with rights to purchase the shares granted to the existing shareholders in proportion to their shareholding within the third quarter of the current year. The Company did not exercise these rights.

12. Investments in subsidiaries

Details of investments in subsidiaries as presented in separate financial statements are as follows:

Company's name	Registered capital		Paid-up capital		Proportion of investment		Cost	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(percent)							
Northern Bangkok Expressway Company Limited	6,000	6,000	5,250	5,250	99.99	99.99	2,604	2,604
Bangkok Metro Networks Limited	254	254	254	254	99.67	90.52	630	507
Total cost							3,234	3,111
Allowance for impairment							(2,466)	(2,466)
Net book value							768	645

In July 2020, the Company purchased 0.2 million ordinary shares of Bangkok Metro Networks Limited (“BMN”) (equal to 0.85 percent of its issued and paid-up share capital) from its existing shareholders, for a total of Baht 11 million. As a result of this transaction, its shareholding changed from 89.67 percent to 90.52 percent.

In May 2021, the Company purchased 2.3 million ordinary shares of BMN (equal to 9.15 percent of its issued and paid-up share capital) from its existing shareholders, for a total of Baht 123 million. As a result of this transaction, its shareholding changed from 90.52 percent to 99.67 percent.

The purchase transaction of investment in the subsidiary was detailed below.

	(Unit: Thousand Baht)	
	<u>Consolidated financial statements</u>	
	<u>2021</u>	<u>2020</u>
Purchase price of investment in subsidiary	123,150	11,471
Less: Non-controlling interests of subsidiary adjusted	(41,745)	(3,772)
Capital deficit from change in shareholding interest in subsidiary	81,405	7,699

13. Investment properties

As at 31 December 2021, the Company has investment properties, consisting of land, which is presented in the consolidated and separate financial statements at its fair value of Baht 321 million (2020: Baht 321 million).

The fair value has been determined based on the valuation performance by an accredited independent valuer, using market approach.

14. Building and equipment

(Unit: Thousand Baht)

	Consolidated financial statements				
	Building and construction improvement	Furniture, fixture and office equipment	Vehicles	Asset during installation	Total
Cost:					
1 January 2020	89,531	215,459	447,127	13,798	765,915
Additions	3,274	31,229	44,668	67,396	146,567
Disposals/Write off	-	(3,168)	(24,291)	-	(27,459)
Reclassification/ Transfer in (out)	193	15,116	-	(12,730)	2,579
31 December 2020	92,998	258,636	467,504	68,464	887,602
Additions	17,621	6,476	41,431	22,875	88,403
Disposals/Write off	-	(978)	(41,796)	-	(42,774)
Reclassification/ Transfer in (out)	6,616	2,037	7,553	(20,981)	(4,775)
31 December 2021	117,235	266,171	474,692	70,358	928,456
Accumulated depreciation:					
1 January 2020	55,070	170,114	233,922	-	459,106
Depreciation for the year	10,694	27,910	36,440	-	75,044
Accumulated depreciation on disposals/write off	-	(3,137)	(22,689)	-	(25,826)
31 December 2020	65,764	194,887	247,673	-	508,324
Depreciation for the year	10,720	24,747	41,737	-	77,204
Accumulated depreciation on disposals/write off	-	(940)	(40,057)	-	(40,997)
Reclassification	-	(60)	-	-	(60)
31 December 2021	76,484	218,634	249,353	-	544,471
Net book value:					
31 December 2020	27,234	63,749	219,831	68,464	379,278
31 December 2021	40,751	47,537	225,339	70,358	383,985
Depreciation for the year					
2020 (Baht 37 million included in cost of services and the balance in selling and administrative expense)					75,044
2021 (Baht 45 million included in cost of services and the balance in selling and administrative expense)					77,204

(Unit: Thousand Baht)

	Separate financial statements				
	Building and construction improvement	Furniture, fixture and office equipment	Vehicles	Asset during installation	Total
Cost:					
1 January 2020	61,336	156,899	438,858	13,525	670,618
Additions	1,100	30,380	43,122	62,681	137,283
Disposals/Write off	-	(3,151)	(24,291)	-	(27,442)
Reclassification/ Transfer in (out)	-	15,036	-	(12,457)	2,579
31 December 2020	62,436	199,164	457,689	63,749	783,038
Additions	17,396	3,283	38,920	21,183	80,782
Disposals/Write off	-	(945)	(41,796)	-	(42,741)
Reclassification/ Transfer in (out)	6,616	2,037	7,553	(16,266)	(60)
31 December 2021	86,448	203,539	462,366	68,666	821,019
Accumulated depreciation:					
1 January 2020	45,051	129,376	229,108	-	403,535
Depreciation for the year	5,854	17,379	35,380	-	58,613
Accumulated depreciation on disposals/write off	-	(3,120)	(22,689)	-	(25,809)
31 December 2020	50,905	143,635	241,799	-	436,339
Depreciation for the year	6,746	18,049	40,746	-	65,541
Accumulated depreciation on disposals/write off	-	(936)	(40,057)	-	(40,993)
Reclassification	-	(60)	-	-	(60)
31 December 2021	57,651	160,688	242,488	-	460,827
Net book value:					
31 December 2020	11,531	55,529	215,890	63,749	346,699
31 December 2021	28,797	42,851	219,878	68,666	360,192
Depreciation for the year					
2020 (Baht 26 million included in cost of services and the balance in selling and administrative expense)					58,613
2021 (Baht 37 million included in cost of services and the balance in selling and administrative expense)					65,541

As at 31 December 2021, the Group have certain items of building improvement and equipment which were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation of those assets amounted to approximately Baht 463 million (2020: Baht 278 million) (The Company only: Baht 284 million, 2020: Baht 266 million).

15. Rights to operate expressway sectors

(Unit: Thousand Baht)

	Consolidated financial statements		
	Rights to operate		
	completed expressway sector	Project costs under construction	Total
Cost:			
1 January 2020	86,447,491	437,439	86,884,930
Additions	86,184	691,283	777,467
Write off	-	(50)	(50)
Reclassification/ Transfer in (out)	436,321	(437,389)	(1,068)
31 December 2020	86,969,996	691,283	87,661,279
Additions	118,124	782,517	900,641
Reclassification/ Transfer in (out)	191,300	(186,780)	4,520
31 December 2021	87,279,420	1,287,020	88,566,440
Accumulated amortisation:			
1 January 2020	54,631,563	-	54,631,563
Amortisation for the year	1,328,195	-	1,328,195
31 December 2020	55,959,758	-	55,959,758
Amortisation for the year	686,151	-	686,151
31 December 2021	56,645,909	-	56,645,909
Net book value:			
31 December 2020	31,010,238	691,283	31,701,521
31 December 2021	30,633,511	1,287,020	31,920,531
Amortisation for the year			
2020			1,328,195
2021			686,151

(Unit: Thousand Baht)

	Separate financial statements		
	Rights to operate completed expressway sector	Project costs under construction	Total
Cost:			
1 January 2020	73,603,201	432,994	74,036,195
Additions	85,199	690,903	776,102
Write off	-	(50)	(50)
Reclassification/ Transfer in (out)	431,876	(432,944)	(1,068)
31 December 2020	74,120,276	690,903	74,811,179
Additions	92,741	688,294	781,035
Transfer in (out)	190,920	(190,920)	-
31 December 2021	74,403,937	1,188,277	75,592,214
Accumulated amortisation:			
1 January 2020	46,787,547	-	46,787,547
Amortisation for the year	1,058,365	-	1,058,365
31 December 2020	47,845,912	-	47,845,912
Amortisation for the year	504,627	-	504,627
31 December 2021	48,350,539	-	48,350,539
Net book value:			
31 December 2020	26,274,364	690,903	26,965,267
31 December 2021	26,053,398	1,188,277	27,241,675
Amortisation for the year			
2020			1,058,365
2021			504,627

16. Intangible asset under concession agreement of the MRT Blue Line Project

(Unit: Thousand Baht)

	Consolidated financial statements		
	Intangible asset under concession agreement of the MRT Blue Line Project	Project costs under construction	Total
Cost:			
1 January 2020	34,021,244	12,747,711	46,768,955
Additions	2,259,577	385,214	2,644,791
Interest cost	59,569	-	59,569
Write off	-	(110)	(110)
Transfer in (out)	11,620,270	(11,620,270)	-
31 December 2020	47,960,660	1,512,545	49,473,205
Additions	160,306	770,489	930,795
Write off	-	(642)	(642)
Reclassification/ Transfer in (out)	1,747	(1,552)	195
31 December 2021	48,122,713	2,280,840	50,403,553
Accumulated amortisation:			
1 January 2020	4,430,056	-	4,430,056
Amortisation for the year	359,430	-	359,430
31 December 2020	4,789,486	-	4,789,486
Amortisation for the year	245,444	-	245,444
31 December 2021	5,034,930	-	5,034,930
Net book value:			
31 December 2020	43,171,174	1,512,545	44,683,719
31 December 2021	43,087,783	2,280,840	45,368,623
Amortisation for the year			
2020			359,430
2021			245,444

(Unit: Thousand Baht)

	Separate financial statements		
	Intangible asset under concession agreement of the MRT Blue Line Project	Project costs under construction	Total
Cost:			
1 January 2020	33,364,651	12,745,919	46,110,570
Additions	2,244,984	385,157	2,630,141
Interest cost	59,569	-	59,569
Transfer in (out)	11,619,615	(11,619,615)	-
31 December 2020	47,288,819	1,511,461	48,800,280
Additions	146,607	769,529	916,136
Transfer in (out)	1,487	(1,487)	-
31 December 2021	47,436,913	2,279,503	49,716,416
Accumulated amortisation:			
1 January 2020	4,111,864	-	4,111,864
Amortisation for the year	311,417	-	311,417
31 December 2020	4,423,281	-	4,423,281
Amortisation for the year	197,331	-	197,331
31 December 2021	4,620,612	-	4,620,612
Net book value:			
31 December 2020	42,865,538	1,511,461	44,376,999
31 December 2021	42,816,301	2,279,503	45,095,804
Amortisation for the year			
2020			311,417
2021			197,331

During the year 2020, the Company capitalised the borrowing cost as part of intangible asset under concession agreement of the MRT Blue Line Project. The weighted average rate used to determine the amount of borrowing cost eligible from capitalisation was 2.55 percent.

17. Project cost of the MRT Chalong Ratchadham Line

(Unit: Thousand Baht)

	Consolidated and Separate financial statements		
	Project Cost of the MRT	Project costs under	Total
	Chalong Ratchadham Line	installations	
Cost:			
1 January 2020	701,462	30,307	731,769
Additions	1,838	39,753	41,591
31 December 2020	703,300	70,060	773,360
Additions	-	77,701	77,701
Decrease	(1)	(33,644)	(33,645)
Transfer in (out)	36,416	(36,416)	-
31 December 2021	739,715	77,701	817,416
Accumulated amortisation:			
1 January 2020	86,818	-	86,818
Amortisation for the year	26,106	-	26,106
31 December 2020	112,924	-	112,924
Amortisation for the year	27,739	-	27,739
31 December 2021	140,663	-	140,663
Net book value:			
31 December 2020	590,376	70,060	660,436
31 December 2021	599,052	77,701	676,753
Amortisation for the year			
2020			26,106
2021			27,739

18. Other intangible assets

The net book value of other intangible assets which are computer software as at 31 December 2021 and 2020 is presented below.

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Cost	223,484	227,563	209,262	213,362
Less: Accumulated amortisation	(175,133)	(164,398)	(163,586)	(155,096)
Net book value	48,351	63,165	45,676	58,266

A reconciliation of the net book value of other intangible assets for the years 2021 and 2020 is presented below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Net book value at beginning of year	63,165	74,027	58,266	69,273
Acquisition	11,553	17,419	11,532	15,441
Reclassification	-	(1,511)	-	(1,511)
Amortisation for the year	(26,367)	(26,770)	(24,122)	(24,937)
Net book value at end of year	<u>48,351</u>	<u>63,165</u>	<u>45,676</u>	<u>58,266</u>

19. Short-term loans from financial institutions

	Interest rate	(Unit: Thousand Baht)	
		Consolidated and Separate	
		financial statements	
	(Percent per annum)	<u>2021</u>	<u>2020</u>
Promissory notes	At the fixed rate	2,000,000	1,500,000
Short-term loan	1M BIBOR plus stipulated margin	-	1,500,000
Total		<u>2,000,000</u>	<u>3,000,000</u>

20. Trade and other payables

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Trade payables - related parties (Note 6)	305,189	518,530	320,538	641,665
Trade payables - unrelated parties	594,979	600,037	537,785	523,602
Accrued interest - unrelated parties	227,327	201,838	226,928	201,386
Accrued expense - related parties (Note 6)	14,997	108,532	14,997	108,532
Accrued expense - unrelated parties	325,195	252,159	299,000	212,307
Other payables	24,726	63,556	23,290	62,265
Total trade and other payables	<u>1,492,413</u>	<u>1,744,652</u>	<u>1,422,538</u>	<u>1,749,757</u>

21. Long-term loans from financial institutions

Loans	Credit facility (Million Baht)	Objective	Interest rate (percent)	Period of repayment	Consolidated financial statements		Separate financial statements	
					2021	2020	2021	2020
21.1 Long-term loan (Fully drew down)	8,000	Working capital	At the fixed rate	Repayment installments in every six month commencing May 2017 to May 2021	-	1,500,000	-	1,500,000
21.2 Tranche A (Fully drew down)	13,557	To invest in the MRT Chalong Ratchadham Line Project	Interest rate of FDR plus stipulated margins	Repayment in monthly installments commencing October 2017 to July 2026	7,034,274	8,569,024	7,034,274	8,569,024
21.3 Tranche B (Fully drew down)	62	To invest in the MRT Chalong Ratchadham Line Project	Interest rate of FDR plus stipulated margins	Repayment in monthly installments commencing October 2017 to July 2026	32,126	39,136	32,126	39,136
21.4 Long-term loan (Fully drew down)	14,000	To invest in the MRT Blue Line Extension Project	Interest rate of 6M THBFIX plus stipulated margins	Repayment in quarterly installments commencing December 2021 to December 2035	13,949,997	13,999,998	13,949,997	13,999,998
21.5 Long-term loan (Fully drew down)	5,000	To refinance existing debt and working capital	At the fixed rate	Repayment installments in every six month commencing April 2022 to April 2026	5,000,000	-	5,000,000	-
21.6 Long-term loan (Fully drew down)	3,630	Repayment for loan obtained from the Company	Interest rate of 6M FDR plus stipulated margins	Repayment in quarterly installments within December 2025	3,005,640	3,317,820	-	-
Total	44,249				29,022,037	27,425,978	26,016,397	24,108,158
Less: Current portion of long-term loans					(3,544,204)	(3,745,161)	(2,861,764)	(3,091,761)
Add (less): Deferred financial fees					131,579	(10,762)	121,251	(13,439)
Long-term loans - net of current portion					25,609,412	23,670,055	23,275,884	21,002,958

(Unit: Thousand Baht)

Movements in the long-term loans account for the year ended 31 December 2021 and 2020 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Beginning balance	27,425,978	24,979,920	24,108,158	21,349,920
Additional borrowings	5,000,000	5,299,998	5,000,000	5,299,998
Repayments	(3,403,941)	(2,853,940)	(3,091,761)	(2,541,760)
Ending balance	<u>29,022,037</u>	<u>27,425,978</u>	<u>26,016,397</u>	<u>24,108,158</u>

For the long-term loan number 21.1

The Company entered into an interest rate swap contract to change the interest rate from a floating rate of 6M THBFIX plus stipulated margins to a fixed rate.

Under the loan agreements, the Company must comply with normal financial covenants relating to various matters, such as the maintenance of debt service coverage ratio and debt to equity ratio.

For the long-term loans number 21.2 to 21.3

The Company pledged bank accounts used to deposit moneys received for work on the M&E system of Phase 1 of the MRT Chalong Ratchadham Line (Note 7) and transferred rights to receive payments for such work to the group of lenders (Note 10) as collateral to secure these loans. The Company had interest expenses amounting to Baht 218 million on such loans for the year ended 31 December 2021 (2020: Baht 277 million).

Under the Credit Facility Agreements, the Company must comply with normal financial covenants relating to various matters, such as maintenance of debt service coverage ratio and debt to equity ratio, dividend payment and conditions for mandatory prepayment.

For Long-term loan number 21.4

The Company entered into interest rate swap agreements for parts of these loans to change the interest rate from a floating rate of 6M THBFIX plus a stipulated margins to a fixed rate.

Under the Credit Facility Agreements, the Company must comply with normal financial covenants relating to various matters, such as maintenance of debt service coverage ratio and debt to equity ratio, dividend payment and conditions for mandatory prepayment.

For Long-term loan number 21.5

On 19 March 2021, the Company signed a long-term loan agreement with a financial institution and also entered into an interest rate swap contract to change the interest rate from a floating rate of 6M THBFIX plus stipulated margin to a fixed rate. The facility was fully drawn down on 1 April 2021.

Under the loan agreement, the Company must comply with normal financial covenants relating to various matters, such as the maintenance of debt service coverage ratio and debt to equity ratio, dividend payment and mandatory prepayment conditions.

For Long-term loan number 21.6

This is a loan of a subsidiary company. Under the loan agreement, the subsidiary must comply with normal financial covenants relating to various matters, such as maintenance of debt service coverage ratio and debt to equity ratio, dividend payment and conditions for mandatory prepayment.

On 22 September 2021, the subsidiary company entered into an amendment of the loan agreement to extend the repayment period for principal due in September 2021 and December 2021 with agreeing to pay the interest only, and extend the due date for the final installment of the principle from by the end of September 2024 to by the end of December 2025.

22. Debentures

Debentures as at 31 December 2021 and 2020 have the following details:

						(Unit: Thousand Baht)	
						Consolidated and Separate	
						financial statements	
Type of debenture	Term	Issuance date	Maturity date	Interest rate	2021	2020	
				(% per annum)			
1. No. 1/2016							
- Tranche 2	5 years	24 June 2016	24 June 2021	2.52	-	1,615,000	
- Tranche 3	7 years	24 June 2016	24 June 2023	3.00	2,000,000	2,000,000	
- Tranche 4	10 years	24 June 2016	24 June 2026	3.30	3,335,000	3,335,000	
- Tranche 5	12 years	24 June 2016	24 June 2028	3.61	2,750,000	2,750,000	
2. No. 2/2016	12 years	11 August 2016	24 June 2028	3.61	500,000	500,000	
3. No. 3/2016							
- Tranche 2	9 years	21 October 2016	21 October 2025	3.78	2,500,000	2,500,000	
- Tranche 3	11 years	21 October 2016	21 October 2027	3.95	3,000,000	3,000,000	
4. No. 1/2017							
- Tranche 1	5 years	7 September 2017	7 September 2022	2.65	2,000,000	2,000,000	
- Tranche 2	7 years	7 September 2017	7 September 2024	3.10	3,000,000	3,000,000	
5. No. 1/2018							
- Tranche 1	3 years	5 April 2018	5 April 2021	2.05	-	3,000,000	
- Tranche 2	5 years	5 April 2018	5 April 2023	2.46	3,500,000	3,500,000	
- Tranche 3	7 years	5 April 2018	5 April 2025	3.01	3,500,000	3,500,000	
6. No. 1/2019							
- Tranche 1	3 years	9 May 2019	9 May 2022	2.65	1,000,000	1,000,000	
- Tranche 2	5 years	9 May 2019	9 May 2024	3.18	2,000,000	2,000,000	
- Tranche 3	7 years	9 May 2019	9 May 2026	3.59	1,000,000	1,000,000	
- Tranche 4	10 years	9 May 2019	9 May 2029	3.84	1,000,000	1,000,000	
7. No. 1/2020							
- Tranche 1	4 years	10 June 2020	10 June 2024	2.88	1,000,000	1,000,000	
- Tranche 2	10 years	10 June 2020	10 June 2030	3.50	1,300,000	1,300,000	
- Tranche 3	12 years	10 June 2020	10 June 2032	3.78	700,000	700,000	
8. No. 1/2021							
- Tranche 1	3 years	28 April 2021	28 April 2024	1.56	2,000,000	-	
- Tranche 2	5 years	28 April 2021	28 April 2026	2.24	2,000,000	-	
- Tranche 3	7 years	28 April 2021	28 April 2028	2.91	1,000,000	-	
- Tranche 4	10 years	28 April 2021	28 April 2031	3.33	1,000,000	-	
Total					40,085,000	38,700,000	
Less: Current portion of debentures					(3,000,000)	(4,615,000)	
Less: Deferred debentures issuing cost					(27,628)	(27,076)	
Debentures - net of current portion					37,057,372	34,057,924	

Movements in the debentures account for the year ended 31 December 2021 and 2020 are summarised below.

	(Unit: Thousand Baht)	
	Consolidated and Separate financial statements	
	<u>2021</u>	<u>2020</u>
Beginning balance	38,700,000	38,200,000
Issuance	6,000,000	3,000,000
Redemption	(4,615,000)	(2,500,000)
Ending balance	<u>40,085,000</u>	<u>38,700,000</u>

On 28 April 2021, the Company issued four tranches of Sustainability Bond No.1/2021, totaling of Baht 6,000 million to fund the refinancing of existing debt and/or invest in the MRT Blue Line Project.

All of the Company's debentures are registered debentures, unsubordinated, and unsecured, without a debenture holders' representative, except for the debenture number 6 to number 8 which have a debenture holders' representative, that pay interest semi-annually. The debentures contain covenants relating to maintenance of interest bearing debt to equity ratio.

23. Unearned revenue from advertising management rights

The Company received remuneration of Baht 35 million from the subsidiary for granting the rights to manage advertising services through the Passenger Information Display System (PIDs), as described in Note 1.1 C. to the financial statements, on the execution date of the agreement (1 January 2010) and this rights will expire in July 2029. The amount is presented under the caption of "Unearned revenue from advertising management rights" and is being amortised to revenue throughout the contract period.

Movements in unearned revenue from advertising management rights account are summarised below.

	(Unit: Thousand Baht)	
	Separate financial statements	
	<u>2021</u>	<u>2020</u>
Beginning balance	10,618	11,866
Recognise to revenue during the year	(1,249)	(1,248)
Ending balance	9,369	10,618
Less: Current portion	(1,249)	(1,249)
Unearned revenue from advertising management rights - net of current portion	<u>8,120</u>	<u>9,369</u>

24. Leases

The Group, as a lessee, has lease contracts for various items of equipment used in its operations. Leases generally have lease terms between 1 - 7 years.

a) Right-of-use assets

Movements of right-of-use assets for the year ended 31 December 2021 and 2020 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements		
	Buildings and Construction improvement	Vehicles	Total
1 January 2020	54,805	43,634	98,439
Additions	7,889	30,217	38,106
Decrease	-	(847)	(847)
Depreciation for the year	(29,884)	(19,300)	(49,184)
31 December 2020	32,810	53,704	86,514
Additions	116,838	2,433	119,271
Depreciation for the year	(46,909)	(19,180)	(66,089)
31 December 2021	102,739	36,957	139,696

(Unit: Thousand Baht)

	Separate financial statements		
	Buildings and Construction improvement	Vehicles	Total
1 January 2020	11,992	41,321	53,313
Additions	7,889	27,769	35,658
Decrease	-	(847)	(847)
Depreciation for the year	(11,586)	(18,104)	(29,690)
31 December 2020	8,295	50,139	58,434
Additions	35,925	2,433	38,358
Depreciation for the year	(26,956)	(18,072)	(45,028)
31 December 2021	17,264	34,500	51,764

b) Lease liabilities

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Lease payments	142,299	90,358	53,064	61,569
Less: Deferred interest expenses	(4,890)	(3,933)	(2,061)	(3,057)
Total	137,409	86,425	51,003	58,512
Less: Portion due within one year	(44,749)	(45,513)	(25,374)	(25,671)
Lease liabilities - net of current portion	<u>92,660</u>	<u>40,912</u>	<u>25,629</u>	<u>32,841</u>

Movements of the lease liability account during the years ended 31 December 2021 and 2020 are summarised below:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Balance at beginning of year	86,425	96,632	58,512	52,058
Additions	119,266	38,107	38,352	35,658
Accretion of interest	2,764	2,678	2,074	1,794
Repayments	(67,284)	(44,427)	(47,489)	(26,254)
Effect of reduction in rental expenses	(3,762)	(6,565)	(446)	(4,744)
Balance at end of year	<u>137,409</u>	<u>86,425</u>	<u>51,003</u>	<u>58,512</u>

A maturity analysis of lease payments is disclosed in Note 41 to the financial statements under the liquidity risk.

c) Expenses relating to leases that are recognised in profit or loss

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Depreciation expense of right-of-use assets	66,089	49,184	45,028	29,690
Interest expense on lease liabilities	2,764	2,661	2,074	1,777
Expense relating to short-term leases and leases of low-value assets	20,369	22,883	19,333	22,109

d) Others

The Group had total cash outflows for leases for the year ended 31 December 2021 of Baht 84 million (2020: Baht 62 million) (the Company only: Baht 64 million, 2020: Baht 44 million), including the cash outflow related to short-term lease and leases of low-value assets.

25. Provision for long-term employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Provision for long-term employee benefits at beginning of the year	932,331	886,390	904,696	862,915
Included in profit or loss:				
Current service cost	78,889	101,419	75,075	97,808
Interest cost	14,250	14,525	13,603	13,976
Losses on settlement	-	146	-	146
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
- Demographic assumptions changes	(26,526)	11,592	(26,167)	11,592
- Financial assumptions changes	(144,168)	(34,677)	(145,518)	(34,677)
- Experience adjustments	(52,337)	(10,188)	(45,316)	(10,188)
Benefits paid during the year	(31,543)	(36,876)	(31,543)	(36,876)
Provision for long-term employee benefits at end of the year	<u>770,896</u>	<u>932,331</u>	<u>744,830</u>	<u>904,696</u>

The Group expects to pay Baht 18 million of long-term employee benefits during the next year (Separate financial statements: Baht 18 million) (2020: Baht 19 million, Separate financial statements: Baht 19 million).

As at 31 December 2021, the weighted average duration of the liabilities for long-term employee benefit is 10.91 - 16.42 years (Separate financial statements: 10.91 - 16.42 years) (2020: 12.49 - 17.55 years, Separate financial statements: 12.68 - 17.55 years).

Significant actuarial assumptions are summarised below.

(Unit: Percent per annum)

	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Discount rate	1.7 - 2.2	1.5 - 2.3	1.7, 2.2	1.5, 1.8
Future salary increase rate	1.0 - 5.0	4.6 - 5.5	1.0, 1.5, 4.0	5.0, 5.5
Staff turnover rate (depending on age)	2.0 - 14.0	1.0 - 7.0	2.0 - 6.0	1.0 - 6.0

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2021 and 2020 are summarised below.

(Unit: Million Baht)

	2021			
	Consolidated financial statements		Separate financial statements	
	<u>Increase 1%</u>	<u>Decrease 1%</u>	<u>Increase 1%</u>	<u>Decrease 1%</u>
Discount rate	(68)	80	(65)	76
Future salary increase rate	77	(67)	74	(64)
Staff turnover rate	(71)	50	(68)	49

(Unit: Million Baht)

	2020			
	Consolidated financial statements		Separate financial statements	
	<u>Increase 1%</u>	<u>Decrease 1%</u>	<u>Increase 1%</u>	<u>Decrease 1%</u>
Discount rate	(90)	107	(87)	104
Future salary increase rate	103	(88)	99	(85)
Staff turnover rate	(94)	70	(91)	69

26. Statutory reserve

Pursuant to Section 116 of the Public Company Limited Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5 percent of its net profit, after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution.

27. Toll revenues

27.1 Under the Construction and Management Contract of the Si Rat Expressway Project (the Second Stage Expressway System) and the Bang Pa-In - Pak Kret Expressway Project and the Concession agreements (Amendment) that granted concession extensions, as described in Note 1.1 A. to the financial statements. The Group and the EXAT agreed to share toll revenues receive as follows:

	The Company	The EXAT
	(Percent)	(Percent)
Urban Network (FES and SES Sector A and Sector B)	40	60
Suburban Network (SES Sector C)	100	Nil
Suburban Network (SES Sector D)	100	Nil
Bang Pa-In - Pak Kret Expressway	100	Nil

27.2 Under a concession agreement of the Si Rat - Outer Ring Road Expressway Project, the Company and the EXAT agreed to share toll revenues receive as follows:

	The Company	The EXAT
	(Percent)	(Percent)
<u>The Si Rat - Outer Ring Road Expressway</u>		
From the construction completion date of relevant Sections		
until end of contract period (14 December 2042)	100	Nil

28. Revenue from commercial development business

Revenue from commercial development business derived from various sources of income, as presented in the separate financial statements for the year ended 31 December 2021, consisted of revenue from expressway system amounting to Baht 52 million (2020: Baht 17 million) and revenue from rail system amounting to Baht 694 million (2020: Baht 706 million). This included revenue from advertising management rights amounting to Baht 1 million (2020: Baht 1 million) (Note 23).

29. Revenue from telecommunications network services and income from provision of space and facilities for the installation of telecommunications equipment

The Company's revenue from telecommunications network services and income from provision of space and facilities for the installation of telecommunications equipment for the year ended 31 December 2021 was as follows:

	(Unit: Thousand Baht)
Telecommunications Business License Type 2 with its own telecommunication network	243,768
Income from provision of space and facilities for the installation of telecommunications equipment	14,100
	257,868

30. Remuneration from fare box revenue and commercial development revenue

30.1 The Concession agreement of the MRTA Initial System Project - Chaloe Ratchamongkhon Line

The Company agrees to apportion revenues derived under the MRTA Initial System Project - Chaloe Ratchamongkhon Line concession agreement to the MRTA. These consist of remuneration from fares, remuneration from commercial development, apportionment of profit in excess of stipulated Return on Equity (ROE) and any benefit derived from the interest rate on a loan being lower the rate specified in the Concession Agreement.

As described in Note 1.1 B.1 to the financial statements, the Company signed the MRT Blue Line Project Concession Agreement on 31 March 2017. Under the MRT Blue Line Concession Agreement, the MRTA Initial System Project - Chaloe Ratchamongkhon Line concession agreement is deemed to be part of the MRT Blue Line Concession Agreement, and only the clauses relating the rights, duties and provisions with respect to fares, fare rates and payment of remuneration to the MRTA will remain in effect until the end of the concession agreement with the MRTA for the MRTA Initial System Project - Chaloe Ratchamongkhon Line.

Remuneration paid to the MRTA under the MRTA Initial System Project - Chaloe Ratchamongkhon Line concession agreement is summarised in Part I of Note 30.2 to the financial statements.

30.2 The MRT Blue Line Concession agreement

Under the MRT Blue Line Project concession agreement dated 31 March 2017, the Company agrees to apportion revenue under the concession agreement to the MRTA, which can be divided into two parts, as follows:

Part I: Remuneration from fares and commercial development revenues of the MRTA Initial System Project - Chaloem Ratchamongkhon Line earned under the related concession agreement until 1 July 2029, with detail as follow:

a) Remuneration from fare revenue

Annual remuneration

The Company has agreed to apportion fare revenue to the MRTA on an annual basis for the period from 2 July 2014 to 1 July 2029. The total amount payable is Baht 43,567 million (inclusive of VAT) divided into annual payments in amounts stipulated in the MRTA Initial System Project - Chaloem Ratchamongkhon Line concession agreement.

As at 31 December 2021, the Company paid accumulated annual remuneration totaling Baht 11,704 million (2020: Baht 9,158 million).

Percentage remuneration

The Company has agreed to apportion to the MRTA 1 percent to 15 percent of the fare revenue of the MRTA Initial System Project - Chaloem Ratchamongkhon Line (inclusive of VAT) from 2 July 2004 to 1 July 2029, in the form of monthly payments.

For the year ended 31 December 2021, the Company paid the percentage remuneration from fare revenue totaling Baht 58 million (2020: Baht 107 million).

b) Remuneration from commercial development revenues

Annual remuneration

The Company has agreed to apportion commercial development revenues to the MRTA on an annual basis for the period from 2 July 2004 to 1 July 2029. The total amount payable is Baht 930 million (inclusive of VAT) divided into annual payments in amounts stipulated in the MRTA Initial System Project - Chaloem Ratchamongkhon Line concession agreement.

As at 31 December 2021, the Company paid accumulated annual remuneration totaling Baht 555 million (2020: Baht 505 million).

Percentage remuneration

The Company has agreed to apportion to the MRTA 7 percent of commercial development revenues of the MRTA Initial System Project - Chaloem Ratchamongkhon Line (inclusive of VAT) from 2 July 2004 to 1 July 2029, in the form of monthly payments.

For the year ended 31 December 2021, the Company paid the percentage remuneration from commercial development revenues totaling Baht 40 million (2020: Baht 42 million).

Part II: Remuneration from fares and commercial development revenues of the MRT Blue Line Extension Project from 31 March 2017 until end of the MRT Blue Line concession period and remuneration from fares and commercial development revenues of the MRTA Initial System Project - Chaloem Ratchamongkhon Line from 2 July 2029 until end of the MRT Blue Line concession period.

The Company is to pay remuneration to MRTA when the Company earns a return on investment over the rate stipulated in the concession agreement, from its operation of the MRT Blue Line Extension Project, as from 31 March 2017, and from its operation of the MRTA Initial System Project - Chaloem Ratchamongkhon Line, as from 2 July 2029, until the end of the MRT Blue Line concession period. The compensation rates are as stipulated in the MRT Blue Line concession agreement.

31. Finance cost

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Interest expense on financial liabilities	1,945,734	1,910,296	1,861,939	1,813,237
Interest expense on lease liabilities	2,764	2,661	2,074	1,777
Interest paid from interest rate swaps	222,972	175,715	222,972	175,715
Others financial cost	15,574	23,835	14,863	23,028
Total	2,187,044	2,112,507	2,101,848	2,013,757

32. Expenses by nature

Significant expenses classified by nature are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Amortisation and depreciation	1,128,606	1,857,980	864,001	1,504,205
Salaries, wages and other employee benefits for the Group's staff	2,291,569	2,462,306	2,176,786	2,339,201
Salaries, wages and other benefits for the EXAT's employees	723,744	861,823	590,348	704,197
Repair and maintenance expenses	2,017,741	2,241,023	1,978,223	2,198,276
Compensation for site acquisition cost	-	61,467	-	61,467
Utilities expenses	765,942	793,068	745,985	772,423
Project remuneration expenses	220,635	350,690	220,635	350,690
Expenses with respect to facilitation and safety on expressway and stations	582,538	589,930	547,048	554,142
Insurance expenses	146,504	134,018	139,508	127,472

33. Income tax

Income tax expenses for the years ended 31 December 2021 and 2020 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated financial		Separate financial	
	statements		statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Current income tax:				
Current income tax for the year	63,607	94,096	-	-
Adjustment in respect of current income tax of previous year	(33)	(750)	-	(635)
Deferred tax:				
Relating to origination and reversal of temporary differences	70,338	288,573	74,203	295,431
Income tax expenses reported in the income statement	<u>133,912</u>	<u>381,919</u>	<u>74,203</u>	<u>294,796</u>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2021 and 2020 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Deferred tax related to				
- Unrealised gain (loss) from cash flow hedges	17,983	(14,622)	17,983	(14,622)
- Gain (loss) from the change in value of financial assets measured at FVOCI	13,837	(339,947)	13,837	(339,947)
- Actuarial gain	44,606	6,654	43,400	6,654
Total	<u>76,426</u>	<u>(347,915)</u>	<u>75,220</u>	<u>(347,915)</u>

The reconciliation between accounting profit and income tax expense is shown below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Accounting profit before tax	<u>1,144,963</u>	<u>2,436,645</u>	<u>846,066</u>	<u>1,992,730</u>
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by applicable tax rate	228,993	487,329	169,213	398,546
Adjustment in respect of income tax of previous year	(33)	(750)	-	(635)
Effects of elimination entry on the consolidated financial statements	(377)	381	-	-
Effects of:				
Tax-exempt revenues	(98,437)	(96,543)	(98,437)	(96,543)
Non-deductible expenses	3,442	2,860	3,442	2,860
Additional expense deductions allowed	(1,947)	(9,058)	(1,071)	(5,641)
Others	2,271	(2,300)	1,056	(3,791)
Total	<u>(94,671)</u>	<u>(105,041)</u>	<u>(95,010)</u>	<u>(103,115)</u>
Income tax expenses reported in the income statement	<u>133,912</u>	<u>381,919</u>	<u>74,203</u>	<u>294,796</u>

The components of deferred tax assets and deferred tax liabilities as at 31 December 2021 and 2020 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Deferred tax assets				
Accrued bonus	43,616	37,451	35,132	30,378
Others accrued expense	3,195	3,515	2,780	3,040
Allowance for expected credit losses	640	78	539	78
Provision for long-term employee benefits	154,179	186,466	148,966	180,939
Leases	265	165	233	124
Deferred financial fees	39,155	9,663	37,089	9,128
Unused tax loss	666,171	162,523	666,171	162,523
Derivative financial liabilities	19,176	37,159	19,176	37,159
Total	<u>926,397</u>	<u>437,020</u>	<u>910,086</u>	<u>423,369</u>
Deferred tax liabilities				
Accumulated amortisation - Rights to operate expressway sectors	642,408	514,522	642,408	514,522
Prepaid project remuneration	1,766,752	1,273,213	1,766,752	1,273,213
Gain from financial assets designated to FVTPL	17,766	16,887	17,766	16,887
Gain from financial assets designated to FVOCI	1,592,115	1,578,278	1,592,115	1,578,278
Total	<u>4,019,041</u>	<u>3,382,900</u>	<u>4,019,041</u>	<u>3,382,900</u>
Presentation in the financial statements				
Deferred tax assets	16,311	13,651	-	-
Deferred tax liabilities	(3,108,955)	(2,959,531)	(3,108,955)	(2,959,531)
	<u>(3,092,644)</u>	<u>(2,945,880)</u>	<u>(3,108,955)</u>	<u>(2,959,531)</u>

34. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the year.

35. Dividends

Dividends declared for the year ended 31 December 2021 and 2020 in the consolidated and separate financial statements consisted of the following:

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)	Paid on
<u>For the year ended 31 December 2021</u>				
Dividend for the year 2020	Annual General Meeting of the shareholders on 28 April 2021	1,529	0.10	25 May 2021
<u>For the year ended 31 December 2020</u>				
Dividend for the second half of the year 2019	Meeting of the Board of Directors on 9 August 2020	1,376	0.09	8 May 2020

36. Promotional privileges

The Company has received promotional privileges from the Board of Investment for the investment of the MRT Blue Line Project, pursuant to the investment promotion certificate No. 60-1074-1-00-1-0 issued on 27 July 2017. Subject to certain imposed conditions, the privileges include an exemption from corporate income tax for a period of 8 years from the date the promoted operations begin generating revenues (11 August 2017).

The Company's operating revenues for the years ended 31 December 2021 and 2020, divided between promoted and non-promoted operations, are summarised below.

	(Unit: Thousand Baht)					
	Promoted operations		Non-promoted operations		Total	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Revenue from expressway business	-	-	5,490,300	6,942,077	5,490,300	6,942,077
Revenue from rail business	1,491,633	2,613,002	1,962,775	1,906,838	3,454,408	4,519,840
Revenue from commercial development business	-	-	745,500	723,607	745,500	723,607
Other income	744	408	967,849	1,018,561	968,593	1,018,969
Total revenues	<u>1,492,377</u>	<u>2,613,410</u>	<u>9,166,424</u>	<u>10,591,083</u>	<u>10,658,801</u>	<u>13,204,493</u>

37. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Group is organised into business units based on its products and services and have four reportable segments as follows:

- 1) The expressway business segment related to the construction and operation of the expressway.
- 2) The rail business segment related to the operation of the rapid transit system.
- 3) The commercial development business segment related to the rental of retail space, and the provision of advertising media services and telecommunication services inside and outside underground train stations and on expressway.
- 4) Other segments are segments where the Company is employed to operate Bang Pa-In - Pak Kret expressway project of the subsidiary.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

The following tables present revenue and profit or loss and total assets information regarding the Group's operating segments for the year ended 31 December 2021 and 2020.

	(Unit: Million Baht)													
	Expressway business segment		Rail business segment		Commercial development business segment		Other segments		Total segments		Elimination of inter-segment revenues		Consolidation	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Revenue from external customers	6,450	8,145	3,454	4,520	822	825	-	-	10,726	13,490	-	-	10,726	13,490
Inter-segment revenues	-	-	-	-	243	279	228	209	471	488	(471)	(488)	-	-
Total revenues	6,450	8,145	3,454	4,520	1,065	1,104	228	209	11,197	13,978	(471)	(488)	10,726	13,490
Segment profit (loss)	4,265	5,017	(1,066)	(489)	538	536	-	-	3,737	5,064	-	-	3,737	5,064
Unallocated income and expenses:														
Interest income													227	296
Gain on sale of investments in financial assets													-	4
Other income													528	533
Selling expenses													(92)	(170)
Administrative expenses													(1,068)	(1,177)
Finance cost													(2,187)	(2,113)
Income tax expenses													(134)	(382)
Non-controlling interests of the subsidiaries													(1)	(4)
Profit for the year to equity holders of the Company	31,921	31,702	-	-	-	-	-	-	31,921	31,702	-	-	31,921	31,702
Rights to operate expressway sectors														
Asset the under concession agreement														
- The MRT Blue Line Project	-	-	43,984	43,254	1,385	1,430	-	-	45,369	44,684	-	-	45,369	44,684
- The MRT Chalong Ratchatham Line	-	-	677	660	-	-	-	-	677	660	-	-	677	660
Receivable under the concession agreement	-	-	7,561	9,211	-	-	-	-	7,561	9,211	-	-	7,561	9,211
Prepaid project remuneration	-	-	9,460	7,058	316	250	-	-	9,776	7,308	-	-	9,776	7,308
Unallocated assets	-	-	-	-	-	-	20,599	20,848	20,599	20,848	(815)	(797)	19,784	20,051
Total assets													115,088	113,616

Transfer prices between business segments are as set out in Note 6 to the financial statements.

Geographic information

The Group operates in Thailand only. As a result, all the revenues and assets as reflected in these financial statements pertain exclusively to this geographical reportable segment.

Major customers

For the years 2021 and 2020, the Group has no major customer with revenue of 10 percent or more of an entity's revenues.

38. Provident fund

The Group and its employees have participated in TISCO Ruamtun 2 Registered Provident Fund as approved by Ministry of Finance in accordance with the Provident Fund Act B.E. 2530. Employees, the Group contributed to the fund monthly at the rates of 3 to 10 percent of basic salary. The fund, which is managed by TISCO Asset Management Company Limited, will be paid to employees upon termination in accordance with the fund rules. During the year 2021, the Group recognised the contribution of Baht 113 million in the consolidated financial statements (2020: Baht 113 million) as expenses and recognised the contribution of Baht 110 million in the separate financial statements (2020: Baht 110 million).

39. Commitments and contingent liabilities**39.1 Capital commitments**

The Group has capital commitments as follows:

	As at 31 December	
	2021	2020
a) Performance improvement for farebox collection systems	Baht 66 million and USD 6 million	Baht 15 million and USD 2 million
b) Acquisition of equipment	Baht 16 million	Baht 44 million
c) Installation of the M&E Systems of the MRT Project	Baht 242 million	Baht 664 million and EUR 3 million
d) Improvement for civil infrastructure of expressway	Baht 172 million	Baht 959 million
e) Telecommunication equipment system	Baht 120 million	Baht 188 million
f) Other capital commitments	Baht 6 million	Baht 4 million

39.2 Long-term service commitments

The Group has commitments in respect of the Procurement of M&E equipment contract, and the Maintenance of M&E equipment and trackwork and infrastructure and civil works contracts of the M&E Project. These contracts will expire between 2023 and 2029.

Future minimum service fees payable under these contracts, excluding escalation in accordance with the general consumer price index are as follows:

(Unit: Million)

	As at 31 December										
	2021					2020					
	Baht	USD	EUR	SGD	YEN	Baht	USD	EUR	SGD	YEN	
Payable:											
In up to 1 year	1,604	-	4	-	379	1,565	-	5	-	380	
In over 1 year and up to 5 years	5,059	2	17	1	1,360	5,176	2	17	1	1,518	
In over 5 years	2,061	2	11	-	-	3,210	2	15	1	221	

39.3 Commitments under various service agreements

The Group has commitments under various service agreements as follows:

(Unit: Million Baht)

	As at 31 December	
	2021	2020
	Payable:	
In up 1 year	325	518
In over 1 year and up to 5 years	244	122

39.4 Operating lease commitments

The Group entered into several lease agreements in respect of the lease of office building space and equipment that are short-term leases and leases of low-value assets. The terms of these agreements are between 2 and 4 years.

Future minimum lease payments required under these operating lease agreements were as follows:

(Unit: Million Baht)

	As at 31 December	
	2021	2020
	Payable:	
In up 1 year	8	12
In over 1 year and up to 4 years	3	8

39.5 Guarantees

There were the following outstanding performance bonds and bank guarantees issued by banks on behalf of the Company.

	(Unit: Million Baht)	
	As at 31 December	
	2021	2020
a) Issued to the MRTA as guarantee for a bid for the operation of the MRT Orange Line Project - Bang Khun Non - Min Buri (Suwinthawong)	-	2,000
b) Issued to the MRTA in accordance with the operation of		
- The MRT Blue Line Concession agreement	210	210
- The MRT Chalong Ratchadham Project agreement	200	200
c) Issued to the Metropolitan Electricity Authority to guarantee electricity under rail projects	118	118
d) Other guarantees	3	11

39.6 Other commitments

	(Unit: Million Baht)	
	As at 31 December	
	2021	2020
a) Commitments in respect of the uncalled portion of investment Northern Bangkok Expressway Company Limited	750	750
b) Commitment in respect of Expressway inspection, maintenance and improvement agreements (paid within one year)	56	128

40. Fair value hierarchy

As at 31 December 2021 and 2020, the Group had the assets and liabilities that were measured or disclosed at fair value using different levels of inputs as follows:

(Unit: Million Baht)

	As at 31 December 2021			
	Consolidated and Separate financial statements			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Financial assets measured at FVTPL				
- Unit trusts	-	766	-	766
Financial assets measured at FVOCI				
- Listed equity	15,476	-	-	15,476
- Non-listed equity	-	-	434	434
Liabilities measured at fair value				
Derivative				
Interest rate swap contracts	-	96	-	96
Assets for which fair value are disclosed				
Investment properties	-	-	321	321
Liabilities for which fair value are disclosed				
Debentures	-	41,092	-	41,092

(Unit: Million Baht)

	As at 31 December 2020			
	Consolidated and Separate financial statements			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Financial assets measured at FVTPL				
- Unit trusts	-	761	-	761
Financial assets measured at FVOCI				
- Listed equity	15,441	-	-	15,441
- Non-listed equity	-	-	400	400
Liabilities measured at fair value				
Derivative				
Interest rate swap contracts	-	186	-	186
Assets for which fair value are disclosed				
Investment properties	-	-	321	321
Liabilities for which fair value are disclosed				
Debentures	-	39,866	-	39,866

41. Financial instruments

41.1 Derivatives and hedge accounting in cash flow hedges

The Company designated an interest rate swap contract as a hedging instrument used to hedge cash flows on a variable rate loan. This risk hedging is defined as an interest hedge.

There is an economic relationship between the hedged item and the hedging instrument as the terms of the interest rate swap match the terms of the variable rate loan (i.e., notional amount, maturity, payment and reset dates). The Company has established a hedge ratio of 1:1 as the underlying risk of the interest rate swap is identical to the hedged risk component. To test the hedge effectiveness, the Company uses the hypothetical derivative method and compares the changes in the fair value of the hedging instruments against the changes in fair value of the hedged items attributable to the hedged risks.

Hedge ineffectiveness can arise from:

- Differences in the interest rate curves applied to discount the hedged item and hedging instrument
- Differences in how the counterparties's credit risk impacts the fair value movements of the hedging instrument and hedged item

The ineffectiveness recognised in profit or loss was immaterial.

41.2 Financial risk management objectives and policies

The Group's financial instruments principally comprise cash and cash equivalents, bank deposit for unearned fare box revenue, trade and other receivables, receivable under the concession agreement, short-term loans from financial institution, trade and other payables, lease liabilities, long-term loans from financial institution and debentures. The financial risks associated with these financial instruments and how they are managed is described below.

Credit risk

The Group is exposed to credit risk primarily with respect to trade and other receivables, receivable under the concession agreement, deposits with banks and financial institutions and other financial instruments. The maximum exposure to credit risk is limited to the carrying amounts as stated in the statement of financial position. The Group's maximum exposure relating to derivatives is noted in the liquidity risk topic.

Trade receivables and receivable under the concession agreement

The Group manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Outstanding trade receivables and receivable under the concession agreement are regularly monitored.

An impairment analysis is performed at each reporting date to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar credit risks. The Group classifies customer segments by customer type. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Financial instruments and cash deposits

The Group manages the credit risk from balances with banks and financial institutions by making investments only with approved counterparties and within credit limits assigned to each counterparty. Counterparty credit may be updated throughout the year. The limits are set to minimise the concentration of risks and therefore mitigate financial loss through a counterparty's potential failure to make payments.

The credit risk on debt instruments and derivatives is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

Market risk

There are two types of market risk comprising foreign currency risk and interest rate risk.

Foreign currency risk

The Company has a significant foreign currency risk in respect of construction payable. As at 31 December 2021, the Company has outstanding financial liabilities denominated in foreign currency amounting to JPY 99 million, USD 0.1 million and SGD 0.1 million (2020: JPY 101 million, USD 0.1 million and SGD 0.1 million) which have not yet been hedged against foreign exchange risk (the majority of these liabilities are repayable within 1 year).

Interest rate risk

The Group's exposure to interest rate risk relates primarily to its short-term loans, long-term loans and debentures. Most of the Group's financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the market rate.

The Group manages its interest rate risk by entering to interest rate swaps for some of long-term loans, in which it agrees to exchange, at specified intervals, between fixed and variable rate interest amounts calculated by reference to an agreed-upon notional principal amount.

As at 31 December 2021 and 2020, significant financial assets and liabilities classified by type of interest rate are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date if this occurs before the maturity date.

(Unit: Million Baht)

Consolidated financial statements							
2021							
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	Effective interest rate (% p.a.)
	Within 1 year	1 - 5 years	Over 5 years				
Financial assets							
Cash and cash equivalents	-	-	-	1,056	75	1,131	0.10 - 0.50
Bank deposit for unearned fare box revenue	-	-	-	225	-	225	0.05 - 1.45
Trade and other receivables	-	-	-	-	473	473	-
Receivable under the concession agreement	-	-	-	7,561	-	7,561	Note 10
Other financial assets	-	-	-	-	16,676	16,676	-
	-	-	-	8,842	17,224	26,066	
Financial liabilities							
Short-term loans from financial institutions	2,000	-	-	-	-	2,000	Note 19
Trade and other payables	-	-	-	-	1,492	1,492	-
Long-term loans from financial institutions	1,120	3,871	-	24,163	-	29,154	Note 21
Lease liabilities	44	80	13	-	-	137	Note 24
Debentures	3,000	25,835	11,222	-	-	40,057	Note 22
Other financial liabilities	-	-	-	-	103	103	-
	6,164	29,786	11,235	24,163	1,595	72,943	

(Unit: Million Baht)

Consolidated financial statements							
2020							
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	Effective interest rate (% p.a.)
	Within 1 year	1 - 5 years	Over 5 years				
Financial assets							
Cash and cash equivalents	-	-	-	1,536	78	1,614	0.25 - 1.30
Bank deposit for unearned fare box revenue	-	-	-	224	-	224	0.05 - 2.00
Trade and other receivables	-	-	-	-	549	549	-
Receivable under the concession agreement	-	-	-	9,211	-	9,211	Note 10
Other long-term investments	-	-	-	-	16,602	16,602	-
	-	-	-	10,971	17,229	28,200	

(Unit: Million Baht)

Consolidated financial statements

	2020						Effective interest rate
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	
	Within 1 year	1 - 5 years	Over 5 years				
Financial liabilities							
Short-term loans from financial institutions	1,500	-	-	1,500	-	3,000	Note 19
Trade and other payables	-	-	-	-	1,745	1,745	-
Long-term loans from financial institutions	1,499	-	-	25,916	-	27,415	Note 21
Lease liabilities	45	41	-	-	-	86	Note 24
Debentures	4,615	20,500	13,558	-	-	38,673	Note 22
Other financial liabilities	-	-	-	-	65	65	-
	<u>7,659</u>	<u>20,541</u>	<u>13,558</u>	<u>27,416</u>	<u>1,810</u>	<u>70,984</u>	

(Unit: Million Baht)

Separate financial statements

	2021						Effective interest rate (% p.a.)
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	
	Within 1 year	1 - 5 years	Over 5 years				
Financial assets							
Cash and cash equivalents	-	-	-	528	68	596	0.10 - 0.50
Bank deposit for unearned fare box revenue	-	-	-	225	-	225	0.05 - 1.45
Trade and other receivables	-	-	-	-	475	475	-
Receivable under the concession agreement	-	-	-	7,561	-	7,561	Note 10
Other financial assets	-	-	-	-	16,676	16,676	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>8,314</u>	<u>17,219</u>	<u>25,533</u>	
Financial liabilities							
Short-term loans from financial institutions	2,000	-	-	-	-	2,000	Note 19
Trade and other payables	-	-	-	-	1,423	1,423	-
Long-term loans from financial institutions	1,120	3,871	-	21,147	-	26,138	Note 21
Lease liabilities	25	26	-	-	-	51	Note 24
Debentures	3,000	25,835	11,222	-	-	40,057	Note 22
Other financial liabilities	-	-	-	-	96	96	-
	<u>6,145</u>	<u>29,732</u>	<u>11,222</u>	<u>21,147</u>	<u>1,519</u>	<u>69,765</u>	

(Unit: Million Baht)

	Separate financial statements						
	2020						
	Fixed interest rates			Floating	Non-interest	Total	Effective
	Within 1 year	1 - 5 years	Over 5 years	interest rate	bearing		interest rate
							(% p.a.)
Financial assets							
Cash and cash equivalents	-	-	-	1,143	71	1,214	0.25 - 1.30
Bank deposit for unearned fare box revenue	-	-	-	224	-	224	0.05 - 2.00
Trade and other receivables	-	-	-	-	513	513	-
Receivable under the concession agreement	-	-	-	9,211	-	9,211	Note 10
Other financial assets	-	-	-	-	16,602	16,602	-
	-	-	-	10,578	17,186	27,764	
Financial liabilities							
Short-term loans from financial institutions	1,500	-	-	1,500	-	3,000	Note 19
Trade and other payables	-	-	-	-	1,750	1,750	-
Long-term loans from financial institutions	1,499	-	-	22,596	-	24,095	Note 21
Lease liabilities	26	32	-	-	-	58	Note 24
Debentures	4,615	20,500	13,558	-	-	38,673	Note 22
Other financial liabilities	-	-	-	-	60	60	-
	7,640	20,532	13,558	24,096	1,810	67,636	

Interest rate sensitivity

The following table demonstrates the sensitivity of the Group's profit before tax and equity to a reasonably possible change in interest rates on that portion of the floating rate loans affected as at 31 December 2021 and 2020 as follows:

Currency	Increase/ decrease (%)	2021		2020		
		Effect on		Effect on		
		profit before tax	Other	profit before tax	Other	
			components of shareholder's equity		components of shareholder's equity	
		(Thousand Baht)			(Thousand Baht)	
Baht	+ 0.25	39,045	47,279	+ 0.25	57,600	35,757
	- 0.25	(39,141)	(47,560)	- 0.25	(57,643)	(35,757)

The above analysis has been prepared assuming that the amounts of the floating rate loans and all other variables remain constant over one year. Moreover, the floating legs of these loans are assumed to not yet have set interest rates. As a result, a change in interest rates affects interest payable for the full 12-month period of the sensitivity calculation.

Liquidity risk

As at 31 December 2021, approximately 12.0 percent of the Group's debt will mature in less than one year (2020: 16.4 percent) (the Company only: 11.5 percent, 2020: 16.3 percent) based on the carrying value of borrowings reflected in the financial statements. The Group has assessed the concentration of risk with respect to refinancing its debt and concluded it to be low. The Group has access to a sufficient variety of sources of funding.

The table below summarises the maturity profile of the Group's non-derivative financial liabilities and derivative financial instruments as at 31 December 2021 and 2020 based on contractual undiscounted cash flows:

(Unit: Million Baht)

	Consolidated financial statements				
	As at 31 December 2021				
	On demand	Less than 1 year	1 to 5 years	Over 5 years	Total
Non-derivatives					
Short-term loans from financial institutions	-	2,000	-	-	2,000
Trade and other payables	-	1,492	-	-	1,492
Lease liabilities	-	47	82	13	142
Long-term loans from financial institutions	-	3,544	12,529	12,949	29,022
Debentures	-	3,000	25,835	11,250	40,085
Total non-derivatives	-	10,083	38,446	24,212	72,741
Derivatives					
Derivative liabilities: net settled	-	-	-	96	96
Total	-	-	-	96	96

(Unit: Million Baht)

Separate financial statements					
As at 31 December 2021					
On demand	Less than 1 year	1 to 5 years	Over 5 years	Total	
Non-derivatives					
Short-term loans from financial institutions	-	2,000	-	-	2,000
Trade and other payables	-	1,423	-	-	1,423
Lease liabilities	-	27	26	-	53
Long-term loans from financial institutions	-	2,862	10,205	12,949	26,016
Debentures	-	3,000	25,835	11,250	40,085
Total non-derivatives	-	9,312	36,066	24,199	69,577
Derivatives					
Derivative liabilities: net settled	-	-	-	96	96
Total	-	-	-	96	96

(Unit: Million Baht)

Consolidated financial statements					
As at 31 December 2020					
On demand	Less than 1 year	1 to 5 years	Over 5 years	Total	
Non-derivatives					
Short-term loans from financial institutions	-	3,000	-	-	3,000
Trade and other payables	-	1,745	-	-	1,745
Lease liabilities	-	46	44	-	90
Long-term loans from financial institutions	-	3,745	9,632	14,049	27,426
Debentures	-	4,615	20,500	13,585	38,700
Total non-derivatives	-	13,151	30,176	27,634	70,961
Derivatives					
Derivative liabilities: net settled	-	12	-	174	186
Total	-	12	-	174	186

(Unit: Million Baht)

	Separate financial statements				
	As at 31 December 2020				
	On demand	Less than 1 year	1 to 5 years	Over 5 years	Total
Non-derivatives					
Short-term loans from financial institutions	-	3,000	-	-	3,000
Trade and other payables	-	1,750	-	-	1,750
Lease liabilities	-	26	36	-	62
Long-term loans from financial institutions	-	3,092	6,967	14,049	24,108
Debentures	-	4,615	20,500	13,585	38,700
Total non-derivatives	-	12,483	27,503	27,634	67,620
Derivatives					
Derivative liabilities: net settled	-	12	-	174	186
Total	-	12	-	174	186

41.3 Fair values of financial instruments

Since the majority of the Group's financial instruments of the Group are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statements of financial position. However, the Company has long-term liabilities in the form of debentures of which carrying value is different from the fair value. As at 31 December 2021, the book value of the Company's debentures was Baht 40,085 million, whereas the fair value was Baht 41,092 million (2020: book value of the Company's debentures was Baht 38,700 million, whereas the fair value was Baht 39,866 million).

The methods and assumptions used by the Group in estimating the fair value of financial instruments are as follows:

- For financial assets and liabilities which have short-term maturities, including cash and cash equivalents, bank deposit for unearned fare box revenue, trade and other receivables, receivable under the concession agreement, short-term loans from financial institutions and trade and other payables the carrying amounts in the statement of financial position approximate their fair value.

- b) The fair value of debt securities is generally derived from quoted market prices or by using the yield curve announced by the Thai Bond Market Association. The fair value of unit trusts is determined from their net asset value.
- c) The fair value of equity securities is generally derived from quoted market prices, or based on generally accepted pricing models when no market price is available.
- d) The fair value of fixed rate debentures and long-term loans is estimated by discounting expected future cash flow by the current market interest rate of loans with similar terms and conditions.
- e) The carrying amounts of long-term loans carrying interest at rates approximating the market rate, in the statement of financial position approximates their fair value.
- f) The fair value of derivatives has been determined using a discounted future cash flow model and a valuation model technique. Most of the inputs used for the valuation are observable in the relevant market, such as interest rate yield curves. The Group considers counterparty credit risk when determining the fair value of derivatives.

During the current year, there were no transfers within the fair value hierarchy.

41.4 Reconciliation of recurring fair value measurements of assets, categorised within Level 3 of the fair value hierarchy

There are no movements in the financial assets categorised within Level 3 of the fair value hierarchy during the year ended 31 December 2021.

42. Capital management

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value and it meets financial covenants attached to the loan agreements. The Group has complied with these covenants throughout the reporting periods.

As at 31 December 2021, the Group's debt-to-equity ratio was 1.87 :1 (2020: 1.76 :1) and the Company's was 1.86 :1 (2020: 1.74 :1).

43. Events after the reporting period

On 23 February 2022, a meeting of the Board of Directors passed a resolution to the Annual General Meeting of the shareholders for approval to propose a dividend payment for the year 2021 to the Company's shareholders at a rate of Baht 0.08 per share or a total of Baht 1,223 million. This dividend payment is subject to the approval of the Annual General Meeting of the shareholders.

44. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 23 February 2022.

ATTACHMENTS ON DISCLOSURE OF INFORMATION

- **Attachment 1** | Information of Directors, Top Management
Accounting and Finance Executives, Chief Accountant and Company Secretary
- **Attachment 2** | Information of Directors in the Subsidiaries and Related Companies
- **Attachment 3** | Information of Head of Internal Audit Unit and
Head of Compliance Unit of the Company
- **Attachment 4** | Details of the Company's Operating Assets
- **Attachment 5** | The Company Policy, Guidelines on Corporate Governance and
the Company Code of Conduct
- **Attachment 6** | Report of the Audit Committee and Reports of Sub - committees



For more information on the Company's website www.bemplc.co.th

In case this Form 56-1 One Report references information disclosed on the Company's website, the disclosed information shall be deemed to be part of Form 56-1 One Report. The Board of Directors certifies the correctness and completeness of disclosed information and annual information disclosure in Form 56-1 One Report



BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED

HEAD OFFICE

587 Sutthisarn Road, Ratchadaphisek, Din Daeng,
Bangkok 10400 Thailand

BRANCH OFFICE 1 (Expressway Business)

238/7 Asoke-Din Daeng Road, Bang Kapi, Huai Khwang,
Bangkok 10310 Thailand
Phone: (66) 2641 4611 Fax: (66) 2641 4610

BRANCH OFFICE 2 (Metro Business)

189 Rama IX Road, Huai Khwang, Bangkok 10310 Thailand
Phone: (66) 2354 2000 Fax: (66) 2354 2020

www.bemplc.co.th