



MANAGEMENT DISCUSSION AND ANALYSIS
(MD&A) Y2021
DON MUANG TOLLWAY PUBLIC COMPANY
LIMITED

22 FEBRUARY 2022



Business Overview in 2021

For the past 2 years, from 2020-2021, the global and Thai economies have been greatly impacted, both short and long terms, from the prolonged COVID-19 outbreak. Although Thailand has a tendency to gradually recover due to progresses in vaccine distribution and relaxation of pandemic control measures, including removal of travel bans for foreign tourists and internationally acceptance of Thai public health measures on the Omicron variant. However, the Thai economy recovery is not expected to bounce back to where it once was in the near future. In particular, businesses related to tourism are predicted to take longer to recover because of high uncertainties of the pandemic situation. As a result, the overall economic recovery of Thailand is still fragile and may require time to heal.

Business operation of Don Muang Tollway Public Company Limited (“the Company”) has successfully overcome the pandemic crisis in Q4/2021 and achieved revenue as planned. The management has applied well-collected data and experiences from the year 2020 to demonstrate the fact that the first wave of COVID-19 outbreak (from January 2020 to mid-December 2020, a period of approximately over 11 months), which was peaked in March 2020, has forced the government to imposed lockdown measures by closing businesses with high spreading risk, which in turn led to the lowest traffic volumes in Q2/2020. When the government eased travel activities later on, traffic volumes during Q3 and Q4 of 2020 have significantly increased. Businesses related to traveling have contributed to the swift recovery of the Company’s revenue and traffic volumes. Towards the end of December 2020, another outbreak occurred and there were mutations of various variants and led to severe outbreaks in 2021, in which the government and the Ministry of Public Health have driven management guidelines to control the spread, including notifying the general public.

The Company has been directly impacted by various measures as attempts to control the spread of the COVID-19 outbreaks in 2020 and 2021. Traffic volumes have declined due to the tightening of control measures, but tend to increase in accordance with the government’s easing measures.

- In 2020, there was 1 lockdown in April, in which AADT of the Original Section was 58,140 vehicles and the Northern Extension Section was 37,143 vehicles.
- In 2021, there were 2 lockdowns in May and July-August in which AADT of the Original Section was 33,556 vehicles and the Northern Extension Section was 23,549 vehicles.

The pandemic situation update on 24 December 2021 by the Director-General of Department of Medical Sciences reported cases of COVID-19 with Omicron variant, which has higher infectious rate and can spread quicker than previous variants found. Therefore, people are urged to heighten their guards and to get vaccinated to help prevent the spread. The Company is confident that the impact from the Omicron variant is only temporary because the



public has given their cooperation and enhanced their protection, including effective distribution of vaccines in 2021 and booster doses in 2022. It is evident that traffic volumes have recovered within a shorter period than the first outbreak. Businesses in this industry are predicted to bounce back faster than other industries because travel activities are essential to every sector unconditionally. When considering the modes of travel by comparing personal vehicles against public transportation in terms of social distancing, it is apparent that personal vehicles surpass all forms of public transportation. In addition, development projects of transportation system and community expansion around the Don Muang Tollway have continued to project an increasing trend.

Despite the COVID-19 outbreak, the Company maintained its business continuity throughout 2021 and was able to lay the foundation towards sustainability development by delivering concrete values to stakeholders. The Company has managed to maintain effectiveness of the operation services complying with the standards with speed, convenience, and safety to the Tollway users with relentless development every single year to ensure customer confidence and satisfaction for returning use of Tollway service. Services are still being provided such as toll collection, rescue and traffic management along with other normal tasks are still effective. Various development projects that the Company has continued and completed include: the Traffic Control & Surveillance System Project (or SMART Project) is fully operational; the Automatic Incident Detection System is undergoing development to enhance efficiency; the Manual Toll Collection System (MTC) and Electronic Toll Collection System (ETC) Improvement Project has been completed and 41 MTC toll booths are currently operational, in which the remaining ETC and MTC systems will be fully operational in the first quarter of 2022 (including the EMV/QR system); the improvement of drainage system under the Tollway project; the Replacement of 99 emergency telephones on the Tollway to solar-powered GSM telephone system project; the IT and Intranet development project; the ISO 9001:2015 and ISO 14001:2015 certification project, in which the ISO system preparation has already been completed and the certification process takes place in Q1/2022; the study on Phase 1 of the Enterprise Resource Planning (ERP) System for decision making in choosing a system that will support effective management with good internal control that is verifiable and appropriate for the type of business, in which has been completed.

Projects that are carried over to 2022 consist of: the Project of Inspection and Assessment for Tollway Elevated Structure, the EMV Card and QR Payment Development project, and the toll collection system “Free Flow (M-Flow)” development project. According to the 2021 action plan, the Company has begun to improve the physical structure of Din Daeng toll plaza to test and install an automatic vehicle detection system. A test of data connection with the Department of Highways’ Single Platform system will be carried out in early 2022, including a



preparation to improve the Network System to support the M-Flow system on the Uttraphimuk's 9 toll plazas in 2022. The M-Flow system will continue to be installed in 2023.

The Company's initial public offering (IPO) of newly issued ordinary shares was during 26-28 April 2021 with a total of 140 Million shares; and registered its paid-up capital with the Ministry of Commerce on 29 April 2021. On 7 May 2021, the Company held its First Trading Day on the Stock Exchange of Thailand, in which "DMT" is the stock symbol for the Company's shares. The goal is to reduce debt burden and increase the Company's liquidity as much as possible in order to generate long-term sustainable returns to shareholders throughout the concession period.

In terms of operating results, the Company has been directly impacted by traffic volumes and its revenue as a result of the COVID-19 pandemic control measures, in which toll revenue dropped by 41% from the previous year and by 33% YoY. Although toll revenue has decreased significantly, the Company has maintained its ability to manage operating expenses effectively (saving on interest expenses by significantly reducing the debt burden) and implemented reduce-control of expenses, adjustment of project plans, etc. The measures that DMT has adopted are the same operational guidelines as the year 2020, which had no impact on Tollway services. In 2021, the Company was able to reduce expenses by 464 MB, or 36%, compared to 2020 mainly from decreases in operating costs excluding amortization costs and income tax expense from 2020 of 236 MB, or 32%. The Company has also taken steps toward achievement of the Company's sustainability. As of 31 December 2021, the Company has no interest-bearing debt. In 2021, DMT has repaid short-term and long-term loans from financial institutions totaling 2,928 MB. With its ability to maintain a very low level of debt-to-equity ratio, D/E Ratio has reduced from 0.40 to 0.07 times. Liquidity ratio increased from 0.27 to 1.29 times when compared to 31 December 2020. Moreover, the Company has a revolving line for business reserve that has not been disbursed of 1,000 MB (31 December 2020: 350 MB), which enables the Company with strong liquidity equipped for the COVID-19 outbreak in the long run. The Company is also ready for business expansion by participating in the government's bidding of Public Private Partnership projects during 2022-2023.

Unit: Million Baht

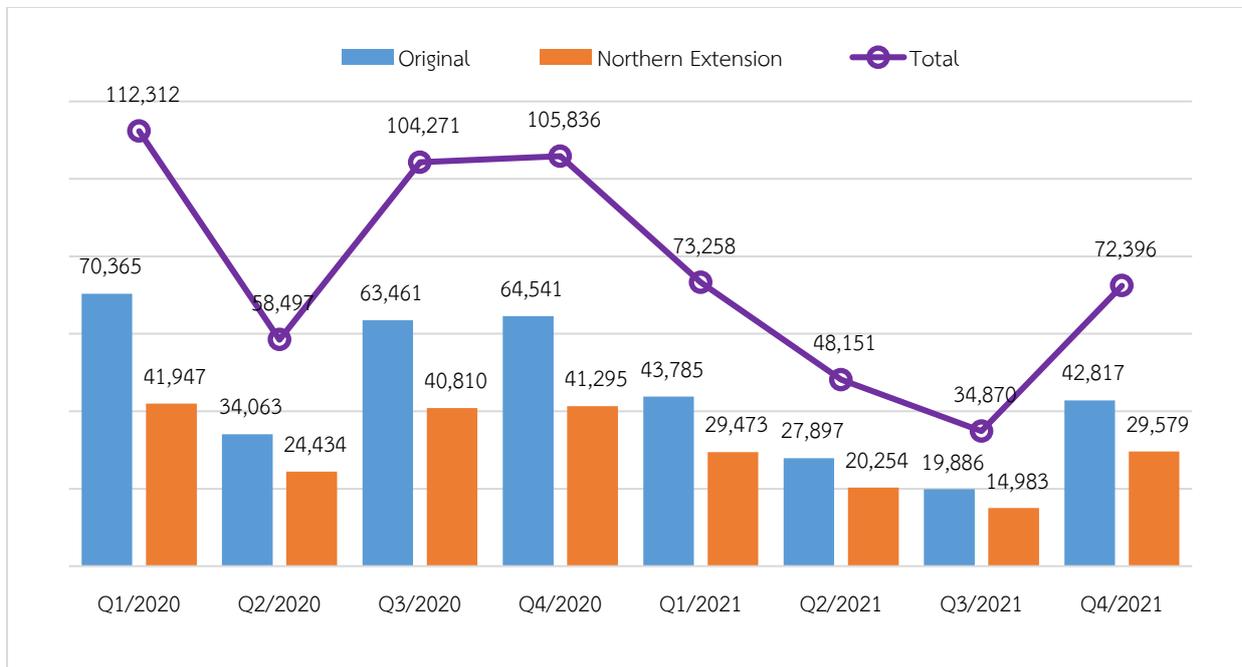
Operating Results	2020 Q4	2021 Q3	2021 Q4	%Increase/ (Decrease)		2020 Jan-Dec	2021 Jan-Dec	%Increase/ (Decrease)
				QoQ	YoY			
Toll Revenue	571.09	182.88	384.79	110	(33)	2,046.90	1,202.38	(41)
EBITDA	429.21	90.56	264.48	192	(38)	1,421.40	729.78	(49)
Net Profit	247.71	42.27	155.79	269	(37)	791.43	404.30	(49)
Earnings per share (Baht per share)	0.24	0.04	0.13	-	-	0.76	0.36	-



In Q4/2021, the Company's toll revenue, EBITDA, and net profit were 384.79 MB, 264.48 MB, and 155.79 MB, respectively, which increased from Q3/2021 due to relaxation of various government measures in each area, curfew announcements, lift of travel bans into the country, and opening of some schools on 1 November 2021. These are positive factors for the economy resulting in better operational results in Q4 than Q3 of the same year. However, Q4/2021 did not outperform Q4/2020.

In 2021, the Company's toll revenue, EBITDA, and net profit were 1,202.38 MB, 729.78 MB, and 404.30 MB, respectively, which decreased from the previous year in accordance with less traffic volumes compliance to the government's measures to intensify the control over spreading of the coronavirus 2019. Nevertheless, the management notices a favorable direction in Q4/2021, in which traffic volumes and revenues are on an increasing trend throughout the quarter.

Traffic Volumes and Effects from COVID-19



Remark: traffic volume for the Northern Extension Section includes Outbound Laksi Toll Plaza

Past information from 2020 revealed the facts that the first wave of COVID-19 outbreak (from January 2020 to mid-December 2020, a total of about 11.5 months) which was escalated in the end of March prompted the government to impose Lockdown measures by closing down high-risk businesses. These events significantly led to the lowest traffic volumes in Q2/2020. The government containment measures worked effectively reflecting in bouncing back of traffic volumes to normal in Q3/2020 and Q4/2020. Therefore, the tollroad industry deems to recover at a fast pace in terms of revenue and traffic volumes.

At the end of 2020 and beginning of 2021, however, a second wave of COVID-19 hit (from January 2021 and lasted for 3.5 months) and led to a drop of traffic volumes in Q1/2021 from Q4/2020, which had traffic volumes per day on the Tollway's Original Section of 64,541 vehicles and on the Northern Extension Section was 41,295 vehicles; whereas traffic volumes per day on the Tollway's Original Section decreased to 43,785 vehicles and to 29,473 vehicles on the Northern Extension Section, or decreased by 32.16% and 28.63%, respectively.

The outbreak was still obviously seen in the Q2/2021, the third wave of COVID-19 outbreak had occurred (third wave in April 2021). On 18 April 2021, the government had announced the new wave of COVID-19 outbreak identified as Alpha variant (UK) with 50% quicker transmissible than the original variant. Moreover, on 21 May 2021, the Delta variant (India) was detected at the Laksi construction campsite (Delta variant spread 60% faster than Alpha variant). On 26 June 2021, the order per Section 9 of Emergency Decree on Public Administration in Emergency Situations B.E. 2548 (2005) (No. 25) was implemented to control the travel activities and reduce



interpersonal contact, which resulted in a decrease of traffic volumes in Q2/2021 from Q1/2021. In Q1/2021, traffic volumes per day on the Original Section was 43,785 vehicles and on the Northern Extension Section was 29,473 vehicles whereas in Q2/2021 traffic volumes per day on the Original Section decreased to 27,897 vehicles and on the Northern Extension Section decreased to 20,254 vehicles or decreased by 36.29% and 31.28%, respectively. To compare with the lowest point in Q2/2020 when Lockdown measures and curfew were imposed, it was found that Q2/2021 had lower traffic volumes than Q2/2020 where traffic volumes per day on the Original Section was 34,063 vehicles and on the Northern Extension Section was 24,434 vehicles or decreased by 18.10% and 17.11%, respectively. The impact was caused by the third wave which had significantly higher number of infection cases than the previous year.

Later in the Q3/2021, the government had released stricter measures due to the increasing number of infections. On 10 July 2021, the government imposed regulations Issued under Section 9 of Emergency Decree on Public Administration in Emergency Situations B.E. 2548 (2005) (No. 27) to control the activities within the highest level of outbreak effective on 12 July 2021 and Night-Time Curfew between 21:00-04:00 hours aiming to reduce the travel movements and strengthen social distancing for people gathering to subdue the number of infections. The Strict Controlled Areas (Red Zone) was also widely expanded into many provinces across Thailand to prohibit crossing between red zone provinces, while the government actively accelerated the inoculation of vaccines. Nonetheless, the confirmed cases were still on the rise until 13 August 2021 when the number of infections reached 23,418 cases per day which was the highest point but consistently decreased since then. Until 1 September 2021, the government announced easing of lockdowns allowing travel across provinces. As a result, the traffic volumes in Q3/2021 decreased from Q2/2021. In Q2/2021, traffic volumes per day on the Original Section was 27,897 vehicles and on the Northern Extension Section was 20,254 vehicles decreased to 19,886 vehicles on the Original Section and 14,983 vehicles on the Northern Extension Section or decreased by 28.72% and 26.02%, respectively.

When compared with Q3/2020, it was found that Q3/2021 had lower traffic volumes than Q3/2020 where traffic volumes per day on the Original Section was 63,641 vehicles and on the Northern Extension Section was 40,801 vehicles or 68.66% and 63.28%, respectively. The traffic volumes in Q3/2021 were considered the lowest as impacted by COVID-19 caused by the Lockdown measures restricting traveling for 2 consecutive months (July and August). Since then, the traffic volumes have been gradually increasing along with the easing of lockdowns by the government in September.

In Q4/2021 on 1-15 October 2021, the government has issued relaxation measures for group activities. Such significant activities are cinema, spa & massage, live music in restaurants. In addition, shopping complexes were allowed to open until 9 pm, including lessening curfew period to 22:00 – 04:00, which was adjusted again to be 23:00 – 03:00 during 16-31 October



2021. Afterwards, Thailand opened up its borders to welcome tourists using the Test and Go method effective on 1 November 2021; and schools started their onsite learning on 14 November 2021. Later in late December 2021, an outbreak of the new COVID-19 variant, “Omicron”, occurred but was still under surveillance in December 2021 resulting in traffic volumes per day on the Original Section of 42,781 vehicles and on the Northern Extension Section of 29,579 vehicles, which was higher than that of Q3/2021 by 115.31% and 97.41%, respectively. In comparison to Q4/2020, however, traffic volumes per day in Q4/2021 on the Original Section and the Northern Extension Section decreased by 33.66% and 28.37%, respectively.

In summary, the overview of traffic volumes throughout 2021 with twice lockdowns (3 months) in May and July-August with annual average daily traffic volume (AADT) of 33,556 vehicles for the Original Section and 23,549 vehicles for the Northern Extension Section, which were lower than the overall traffic volumes of 2020 with 1 lockdown in April with AADT of 58,140 vehicles for the Original Section and 37,143 vehicles for the Northern Extension Section. To summarize, AADT for the Original Section and the Northern Extension Section in 2021 decreased from 2020 by 42.28% and 36.60%, respectively.

Outlook for Tollroad usage in 2022

From the lockdown measures, the restrictions on general transportation within and across provinces to prevent the spread of COVID-19 have been in place for a period of 2 months, in July and August 2021, which has impacted the traffic volumes on the Tollway in Q3/2021 to be the lowest point. However, in September, the traffic volumes have started to increase following the easing of lockdown restrictions placed by the government. Continuously in Q4/2021, relaxation measures on group activities such as opening of shopping complexes, dining-in at restaurants, lifting travel bands for tourists, and onsite learning at schools, etc. encouraged traffic volumes. Nevertheless, the new variant of COVID-19, Omicron, must be monitored closely due to its higher spreading rate than Alpha and Delta variants, but even at such a high rate, there is evidence that the rate of serious illness is considered very low or mostly no symptoms for vaccinated persons. Many public health scholars suggested that this mutation of the Omicron variant may become an endemic disease and from the government’s policy in early 2022 that mobilizes the booster vaccination (3rd dose) and the launch of Gen 2 vaccine trials as prevention against Omicron in various countries will effectively help initiate herd immunity.

For the trend of traffic volumes for 2022, the COVID-19 Omicron variant still needs to be closely monitored and if it has no significant impacts on the public health system and can be properly managed by the government, there will be supporting factors to a swift rebound of traffic volumes according to levels of continuous easing government restrictions. Vaccination to all citizens, including students in order for the education system to return to normal. The statistics of citizens receiving vaccine and those who are fully immune with 2 doses are increasing as well as Booster Dose being continuously inoculated. It is anticipated for the 2nd or 3rd



generation of vaccines will be available in the future with higher quality and effectiveness. The government's plan of reopening of the country for tourists to enter without the mandatory quarantine was effective on 1 November 2021, as well as schools to be resumed, which will support travel activities and increase the traffic volumes of the Tollway more than Q3/2021 because the Company's business is about tollroad infrastructure related to the travel activities. Therefore, this industry is expected to recover at a faster pace than other industry because all sectors still rely on transportation activities or transportation is constantly needed. When considering travel modes by comparing traveling by private vehicle, public transit and metro rail, it can be seen that private vehicle provides better Social Distancing than public transit, metro rail and other public mass transits which is a positive factor to travel by private vehicles. The development of transportation system around Tollway and surrounding communities are still constantly growing while the forecast of infections and the government control measures still need to be closely monitored. If the new strain of COVID-19, Omicron variant, becomes endemic, it will lead to continuous economic recovery and travelling will resume quickly after the end of the pandemic. If, however, the outbreak escalates beyond control, it is expected that the government with 2 years of experience in managing the pandemic will be able to continue to do so. Therefore, the overview of the impact on traffic volumes is predicted to undergo the same pattern as seen during the previous Lockdown measures.



Operating Results of 2021

Unit: Million Baht

	2020 Q4	2021 Q3	2021 Q4	%Increase/ (Decrease)		2020 Jan-Dec	2021 Jan-Dec	%Increase/ (Decrease)
				QoQ	YoY			
Toll Revenue	571.09	182.88	384.79	110	(33)	2,046.90	1,202.38	(41)
Cost of toll road operations	199.01	93.33	146.39	57	(26)	768.04	518.14	(33)
Gross profit	372.08	89.55	238.40	166	(36)	1,278.86	684.24	(46)
Investment income	1.99	1.38	1.38	(0)	(31)	12.54	6.87	(45)
Other income	0.55	1.18	0.93	(21)	69	3.79	3.12	(18)
Distribution costs	4.47	4.03	5.13	27	15	24.09	18.77	(22)
Administrative expenses	37.01	33.32	39.20	18	6	174.94	161.97	(7)
Financial costs	23.53	2.14	1.44	(33)	(94)	106.87	24.18	(77)
Tax expense (income)	61.90	10.35	39.15	(278)	(37)	197.86	85.01	(57)
Profit for the period	247.71	42.27	155.79	269	(37)	791.43	404.30	(49)
Total comprehensive income for the period	246.98	38.08	154.39	305	(37)	781.29	392.37	(50)
Basic earnings per share (Baht)	0.24	0.04	0.13	-	-	0.76	0.36	-

Financial performance of Q4/2021 in comparison to Q3/2021 and Q4/2020

In Q4/2021, the Company had a profit for the period of 155.79 MB, decreased from Q4/2020 by 91.92 MB, or 37%, mainly from a decrease in toll revenue by 186.30 MB, or 33%, while cost of toll road operations, distribution costs, and administrative expenses decreased totally by 49.77 MB, or 21%. The Company is still able to manage, monitor, and reduce cost of toll road operations and operating expenses. When compared to Q3/2021, the Company's profit increased by 113.52 MB, or 269%, mainly from an increase in toll revenue by 201.91 MB, or 110%. This was a result of increase traffic volumes in accordance to circumstances and the government's various relieving measures occurred in Q4/2021 as detailed in the traffic volumes and impact of the COVID-19 pandemic section.

Financial performance of 2021 in comparison to 2020

For the years 2021 and 2020, the Company had profit for the period of 404.30 MB, or a decrease by 49% from the previous year of 387.13 MB, mainly due to a decrease in toll revenue by 844.52 MB, or 41%. The Company has applied management guidelines of 2020 to the outbreak of COVID-19 that has spread more severely from the previously year with higher number of infected cases and death tolls. As a result, DMT was able to reduce cost of toll road operations



and operating costs by 268.19 MB, or 28%, when compared to 2020. Moreover, the success of listing 140 million newly-issued ordinary shares on the Stock Exchange of Thailand and using such money to pay off short-term and long-term loans resulted in a decrease in financial costs by 82.69 MB, or 77%, from 2020. Key performance results are as follows:

- Toll revenue

In 2021, DMT had toll revenue of 1,202.38 MB, decreased from the previous year by 844.52 MB, or 41%, due to less traffic volumes as detailed in the traffic volumes and impact of the COVID-19 pandemic section.

- Cost of toll road operations

In 2021, cost of toll road operations was 518.14 MB, decreased from the previous year by 249.90 MB, or 33%, because of the amortization expense of the concession cost was decreased as a result of lower actual traffic volumes, which was in line with the decrease in revenue. Employee expenses and maintenance obligations has also been reduced, as well as various cost reduction measures were enacted such as the postponement of some projects which does not affect the level of service for a period of time.

- Distribution costs and Administrative expenses

In 2021, distribution costs and administrative expenses totaled 180.74 MB decreased from the previous year by 18.29 MB, or 9%. The Company implemented various measures to reduce expenses related to employees, PR, donations to fund scholarships for the Dream for Achievement Foundation, consultation, in which decreased in comparison to the previous year.

- Financial costs

In 2021, financial costs were 24.18 MB decreased from 2020 by 82.69 MB, or 77%, mainly from the Company's repayment of short-term and long-term loans with financial institutions of 2,928 MB by cash flow from IPO and operations. As of 31 December 2021, therefore, DMT has no interest bearing debts which resulted in a significant decrease in financial costs.

- Tax expenses

In 2021, tax expense was 85.01 MB decreased by 112.85 MB, or 57%, when compared to 2020. This is in line with the net profit as resulted from lower financial costs.



Financial Position

Unit: Million Baht

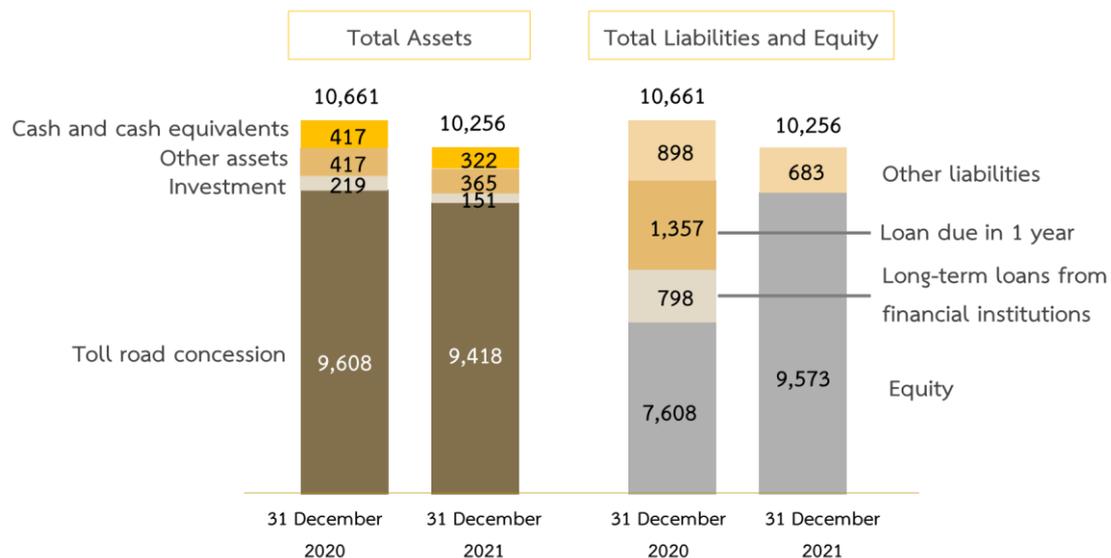
	2020 31 December	2021 31 December	Increase/(Decrease)	
			MB	%
Total assets	10,660.76	10,256.05	(404.71)	(4)
Total liabilities	3,052.98	682.69	(2,370.29)	(78)
Total equity	7,607.78	9,573.36	1,965.58	26

Financial status as of 31 December 2021, DMT had total assets of 10,256.05 MB, decreased by 404.71 MB or 4%. Total liabilities was 682.69 MB, decreased by 2,370.29 MB or 78% mainly due to repayment of short-term and long-term loans from financial institutions, which is paid from cash flows from the listing of 140 million newly-issued ordinary shares on the SET and operations.

Total equity was 9,573.36 MB, increased by 1,965.58 MB or 26% in comparison to December 31, 2020, largely from the increase in registration of paid-up capital from the newly-issued ordinary shares that were registered on SET and the surplus of the newly-issued ordinary shares. The Company registered such increase of the paid-up capital with the Ministry of Commerce on 29 April 2021.

As of 31 December 2021 in comparison to 31 December 2020

Unit: Million Baht





Cash Flows

Unit: Million Baht

Statement of cash flows	31 December 2020	31 December 2021	Increase / (Decrease)	
			Amount	%
Net cash from operating activities	1,188.66	483.59	(705.07)	(59)
Net cash from investing activities	192.47	41.20	(151.27)	(79)
Net cash used in financing activities	(1,356.79)	(620.23)	736.56	(54)
Net (decrease) increase in cash and cash equivalents	24.34	(95.44)	(119.78)	(492)
Cash and cash equivalents as of 1 January	392.85	417.19	24.35	6
Cash and cash equivalents as of 31 December	417.19	321.75	(95.43)	(23)

As of 31 December 2021, the Company has cash and cash equivalents of 321.75 MB, decreased by 95.43 MB or 23% when compared to 31 December 2020. Net cash from operating activities was 483.59 MB. Net cash from investing activities was 41.20 MB. Net cash used in financing activities was 620.23 MB, which came from cash received from the issuance of shares after deducting expenses directly related to IPO of 63.48 MB with a remaining amount of 2,176.52 MB. Repayment under financial contracts, dividend payments to shareholders, and lease agreements amounted to 2,796.75 MB.

Significant financial ratios

For operating results in 2021 and 2020, DMT's profitability ratios decreased from the previous year due to a decrease in toll revenue, which was affected by the COVID-19 pandemic as aforementioned in the traffic volumes and impact of the COVID-19 pandemic section. On the other hand, the liquidity ratios improved when compared to 2020 because the use of some of the proceeds from the capital increased to repay loans to financial institutions, resulting in significant decreases in interest bearing debts and financial costs as shown below:



	Jan-Dec	Jan-Dec
Gross margin (%)	62.48%	56.91%
EBITDA Margin (%)	69.44%	60.70%
Net profit margin (%)	38.66%	33.62%
Earnings per share (Baht per share)	0.76	0.36
Debt to Equity (D/E) (Times)	0.40	0.07
Current ratios (Times)	0.27	1.36
Quick ratios (Times)	0.25	1.27



Major Development Projects

The Company operates and determines operational plans to achieve the goal of being a High Performance Organization (HPO) as demonstrated in various projects as follow:

Manual Toll Collection System (MTC) Development Project and Preparation of Electronic Toll Collection System (ETC)

Development of all toll collection systems consisted of 29 MTC toll booths, 13 ETC toll booths, and 19 MTC/ETC (can operate as MTC or ETC or both in 1 booth) toll booths—totaling of 61 toll booths. As of November 2021, the cumulative result of 88.20% from the cumulative work plan of 93.76% has already been installed and opened for service as MTC of 41 booths from the total of 61 toll booths. The ETC system has also been installed but activated as the MTC system because it is undergoing software development to retrieve customer data registered with the Department of Highways and the Expressway Authority of Thailand for aiding tax invoice issuance process and testing of the system at toll booths. It is expected that all installations and services will be available within the first quarter of 2022.

EMV Card and QR Payment Development

Following the Company's development of EMV card payment system to replace Smart Purse payments and its development of QR payment in responsive to consumer behavior towards cashless society, which has been accelerated by the COVID-19 outbreak, DMT has conducted testing in parallel with its toll collection system development. The testing was held at the Demo Lane Test in February 2021. Test results of connecting the device at the toll lane did not reveal any problems, in which each step of system testing was conducted in parallel with the development of the MTC and ETC systems. For the latest status in November 2021, the Company has performed UAT testing without deducting payments and testing of reporting has been completed. Pilot testing by the Company's management personnel will be conducted, including planning of employee training concerning usage of this system. Moreover, implementation of the new system shall be promoted to the public, in which the official public launches and the activation of the Company's MTC and ETC systems are expected in the first quarter of 2022.

The toll collection system “Free Flow (M-Flow)” development project

On 14 September 2020, the Company has signed the Memorandum of Agreements (MOU) to study and develop the toll collection system “Free Flow (M-Flow)” in line with the Single Platform System. The MOU is collaboration among 5 agencies including Department of Land Transport, Department of Highways, Expressway Authority of Thailand, and private sector concessionaires—Bangkok and Expressway Metropolitan PCL. and Don Muang Tollway PCL.



The Company has been studying and designing M-Flow system in terms of integration of system work, operation management, and violation management and debt/ fine collecting/ handling system including related law enforcement issues to make the study in parallel with the policy set forth by Ministry of Transport and be ready for development and implement of M-Flow system in the near future. According to the Plan for 2021, the renovation of Din Daeng Toll Plaza has begun and ready for installing equipment and conducting vehicle detection test. Early 2022, Data transmission to the Department of Highways' Single Platform System will be tested. While improving Network System to support M-Flow System on all 9 toll plazas of the Tollway will be done in 2022 and ready to install the M-Flow system in 2023. Currently, the Company has conducted a study on various issues such as related laws, technical issues involving the M-Flow system, and costs involved in the operation.

Traffic Control & Surveillance System - Smart Project

The system development project has been completed and delivered to the Company on 31 August 2021, including Matrix Signs, VMS, Over Speed Warning Signs, CCTV cameras. In 2022, the Automatic Incident Detection software is being fine-tuned for higher accuracy. Therefore, ongoing studies have been conducted in order to develop such software using Deep Learning technology for developing system optimization.

Studies of Other Non-Toll Road Businesses

According to the Company's Board of Directors assigning the management to conduct feasibility studies on investment in other non-toll road businesses different from the existing business in order to strengthen and generate other income for the business, such as technology or Start Up technology or Start Up consumer, the management is to establish a clear operating framework and to consider the possibilities to initiate such start up projects, including personnel with potential for development. The time frame for studying and presenting results is within 2022, as part of the 2022 business plan.

Study of Connector locations of the Don Muang Tollway to support urban development and to reduce congestion on Vibhavadi Rangsit Road from the development of area along the Tollway

The Company has continuously monitored the changes of road network and transportation system nearby the Tollway and discovered that the urban area has expanded around the Don Muang Tollway, causing traffic volumes in that area to be congested. Therefore, it is advisable to study the guidelines for additional entries and exits in order to be in line with future developments, which are new connector locations other than projects arising from the government policies by considering other potential areas such as Entry/Exit points connecting local highway connecting Vibhavadi Rangsit-Phahonyothin-Theparak, Entry to Don Muang Airport



from North Rangsit inbound direction, Bang Sue Central Station connecting point, and other areas that have expanded from the transportation network development.

Project of Inspection and Assessment for Tollway Elevated Structure

The Company has executed a plan for integrity checks, including assessing the condition and performance of the Tollway. The scope of work consisted of: 1) Visual & Instrument Inspection, 2) Bearing Pad Inspection, 3) Geometry Measurement, 4) Structure Behavior Measurement and Load Test, and 5) Structure Capacity Assessment. The assessment is planned for January 2022, in which the results will provide information on the age of the tollway and its strength, which is an indicator of stability and sustainability of its structures.

ISO 9001 and ISO 14001 Certificates

The Company is under the process for certification of ISO 9001:2015 Quality Management Standard and ISO 14001:2015 Environment Management Standards to support the sustainability development of the organization. The scopes cover business operations and tollway maintenance. The preparation process of ISO system has been completed and was officially announced in November 2021 to require all departments to operate by the work manual developed in accordance with the ISO standard system and later enter into the certification process. The Company aims to be certified in the first quarter of 2022.

ERP system development project

DMT has set up an ERP system development plan to study the development of the system (System Improvement) to enhance the systems' efficiency, reduce unnecessary working processes and support future business plans. The study and operation process analysis was completed in November 2021 as planned. According to the results of the study, the guidelines for the development of an ERP system for enterprise ERP businesses have been established with the ability to connect and extend new technologies for efficiency such as Business Intelligence, Robotic Process Automation, and Artificial Intelligence in line with new business expansion plans and promote the development of personnel, including effective management control.

The Feeder Transportation System Project

The Company and King Mongkut's Institute of Technology, Ladkrabang (KMITL) have cooperated to study and develop the Feeder Transportation System project connecting the transportation network between communities to a large mass transit system, such as sky trains and airports, by using Smart Feeder transportation system. The Smart Feeder System is a mass transit system ranging from EV Minibus, EV Full-Size Bus and Tram bus using electric vehicle (EV) which is environmentally friendly, modern technologies such as Smart Card, QR Code, and EMV (Europay, Mastercard, and Visa) systems to support the Cashless Society for payment of fares,



supporting WiFi communication, a CCTV system to monitor the safety of the people in the buses, mobile application, Smart bus stop using solar energy for convenience, speed and safety on traveling and in line with policies and action plans from the government. The results from the study of the development of the Feeder Transportation System for the Red Line suburban train project, in which the prototype study has been carried out at Rangsit Station, has now completed. Currently, the study is in the process of expanding to the Pink Line area, as well as a plan to conduct a study in the EEC zone in later on.



Sustainability Development

After the Company has learned and planned business operations to adapt and develop the organization to cope with risks and opportunities that may arise in the future continuously throughout 2021 in order to ensure stable and sustainable growth by emphasizing on sustainable business plans to support activities covering environment, social, and governance or economic (ESG) dimensions. DMT has taken overall actions in 2021, such as revising the Corporate Governance (CG) Policy to be in line with sustainability development, reviewing charter of all committees to promote sustainability, promoting participation in training of employees and related executives. After the management has prepared the business plan for sustainability for the year 2022, goals for management and business plan for the year 2022 in 3 dimensions were set. As a result, the management is required to plan for continuity and be aware of building a stable and sustainable financial immunity by taking into consideration the impact of the COVID-19 outbreak that affects traffic volumes and the Company's revenue, including factors of various changes such as Change of Technology, Change of Law and Environment, and Change of Consumer Behavior, which continues to commit to strive in developing the organization towards sustainability in 3 dimensions—environment, social, and corporate governance.

According to the sustainability business plan for the year 2022, the vision and mission of the organization have been revised in accordance with the sustainability policy. After being approved by the Board of Directors' meeting No. 10/2021, dated 15 December 2021, the management has planned and established working groups to drive and deliver values towards sustainability in 3 dimensions. The working groups comprise of main working groups and sub-working groups working in conjunction by personnel from various departments in addition to the main tasks defined by the original organization structure. Moreover, the Managing Director has approved the adjustments of the organization structure within the Managing Director office to keep up with the changes of situations in accordance with the Company's vision and business plan for sustainability. Restructuring of the Managing Director Office was done using existing positions and personnel within the office. As a result, the Business Sustainability Development was established, which consisted of Human Resources and Quality Management System (formerly called Human Resource and CSR) responsible for steering of personnel development and maintaining of Quality and Environmental standards (ISO 9001:2015 and ISO 14001:2015) with the expectation to be certified within Q1/2022, and Business Development and Sustainability Strategy (formerly called Business Development and Strategy) responsible for conducting sustainable business development plans. These 2 functional departments together makes a new department under the Managing Director Office to clearly define roles and responsibilities regulation to achieve business sustainability.



For the main working groups and sub-working groups consisting of one or more departments to work together, or called matrix management, are the end product of assembling personnel from various departments within the organization in order to reduce the steps of coordination for faster and more efficient process in supporting the sustainability in 3 dimensions—environment, social, and corporate governance. Working teams and scopes of responsibility can be briefly summarized in the table below:

No.	Working Team	Brief duties and scopes of responsibilities
1	Sustainable Corporate Governance Working Team	Supports compliance with the CG Policy as prescribed by the Company’s Board of Directors.
2	Risk Management Working Team	Supports corporate risk management and considers increasing risk issues related to sustainability in ESG dimensions, including reporting of emergency management and business continuity, as well as reports from the pandemic emergency management committee.
3	5S Working Team	Supports 5S activities to create order and cleanliness, consisting of sort-set in order-shine-standardize-sustain.
4	OSH Working Team	Supports activities related to Occupational Safety, Health, and Working Environment.



No.	Working Team	Brief duties and scopes of responsibilities
5	Personal Data Protection Act Working Team	Supports information technology systems to protect personal information.
6	ISO 9001 and ISO 14001 Working Team	Supports the development of services and environmental standards.
7	ERP System Working Team	Supports ERP system development activities to promote flexibility and expansion of future opportunities.
8	Technical Working Team on Cost Review according to procurement regulations	Supports cost review of key technical materials prior to procurement announcement.
9	3Rs (Reduce, Reuse, Recycle) Working Team	Supports activities to deliver values to the environment, manage waste, promote alternative energy, study renewable energy, and reduce greenhouse gas emission.
10	Investor Relations Working Team	Supports investor relations activities and liaise with investors, shareholders, and stakeholders.
11	New Projects Working Team	Supports studies of new projects that are appropriate and worth investing in, both in toll road and non-toll road businesses.
12	Working Team for Driving Innovation and Advanced Technology	Supports education and organizational innovation development for sustainability and responding to changes in technology of customers and consumers.

The results and goals set by the Company in its business plan for sustainability in 2022 are divided according to the 3 dimensions of sustainability as follows:

- 1) Environment refers to business operations in parallel with environmental conservation, which is a significant global issue to drive towards global warming reduction and climate change such as pollution prevention, greenhouse gas emission reduction, and efficient use of resources.
- 2) Social refers to business operations in parallel with service quality, convenience, speed, Occupational Safety, Health, and Working Environment, relationships with communities and stakeholders, including human rights and equality, and development of service innovations that take into consideration the needs of users.



- 3) Governance or Economic refers to corporate governance to provide stable returns with transparency, a check or balance system, strictly under the rules, regulations, and restrictions; as well as to prepare for investment in business expansion, to participate in bidding of the government's PPP project, including efficient personnel development.