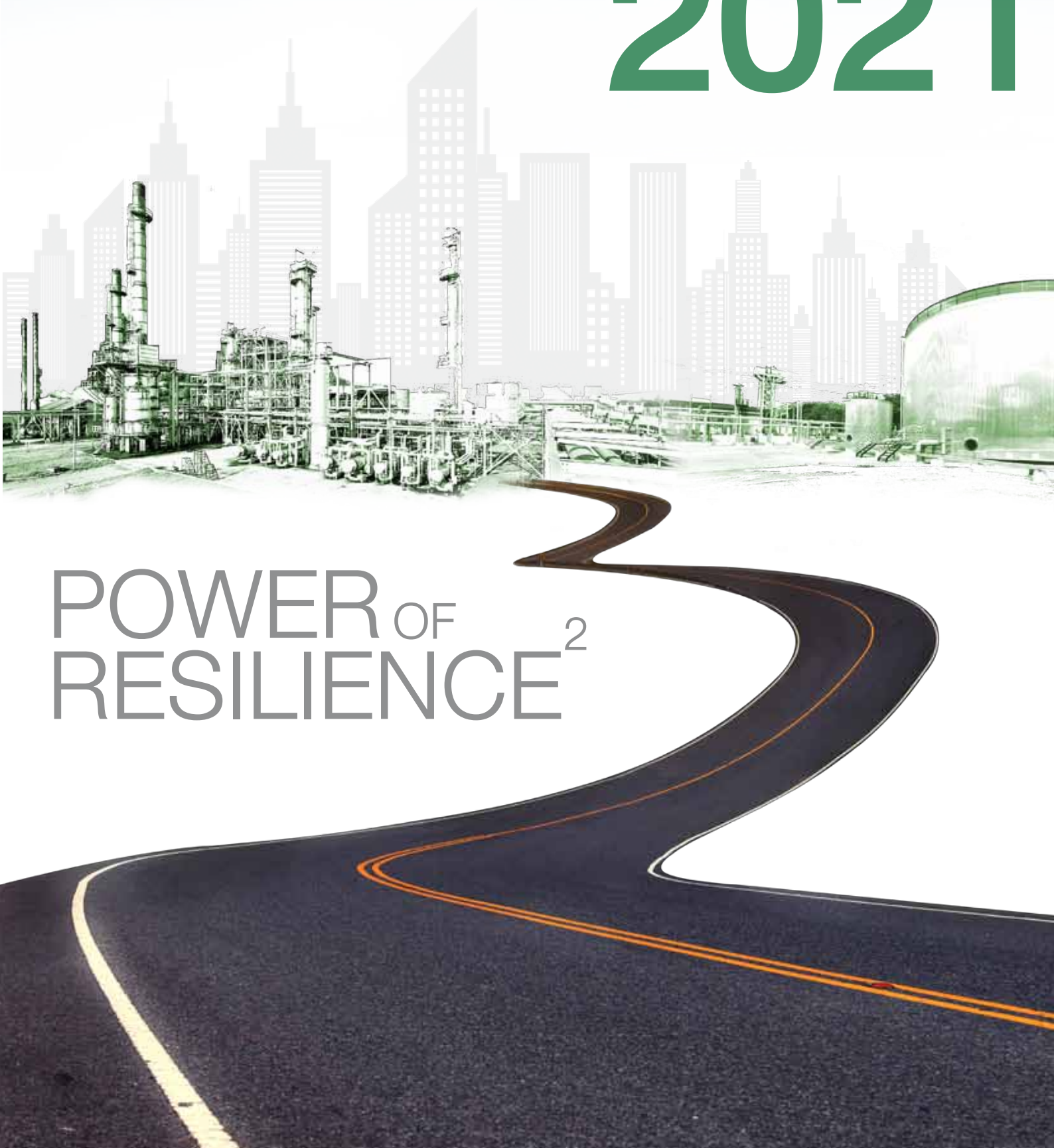




Tipco Asphalt
Public Company Limited

56-1 One Report 2021

POWER OF
RESILIENCE²



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This 56-1 One Report referred to the information disclosed on the Company's website, which is an integral part of the 56-1 One Report. The Board of Directors certifies the correctness and completeness of such referred information.

MESSAGE FROM THE CHAIRMAN

The year 2021 has been very challenging for Tipco Asphalt Public Company Limited and its subsidiaries. The impact of Covid-19 pandemic and related restrictions have delayed road maintenance and construction activities in many countries. The effect of continued rise in crude demand and price driven by the world economic recovery on cost of production of asphalt was further aggravated by the restriction of crude import from Venezuela since the end of 2020. Nonetheless, I am pleased to report that despite the challenges, the Company and its subsidiaries managed to register a total revenue of Baht 27,053 million, and a net profit of Baht 2,220 million.

Such commendable result was achieved through a combination of 1) the Company's ability to secure some alternative crudes and feedstocks from other sources than Venezuela; 2) availability of Venezuelan crude inventory accumulated prior to the import restriction which was sufficient to blend with the alternative crudes and feedstocks for processing at our KBC refinery in Malaysia at optimum throughout and still achieved a reasonable cost of asphalt production; and 3) the very effective marketing and sales strategy adopted during the tight supply of asphalt where priority of available asphalt volume was given to domestic and retail customers at higher profit margin when compared to international trading customers.

Realizing the necessity to enlarge retail customer base in the domestic market, the Company decided to acquire an additional 37.5 % shareholding in Thai Slurry Seal Company Limited ("TSS"), our subsidiary in the road construction business, in February 2021. We became the major shareholder of the construction company with total shareholding of 62.5%. Following the acquisition, the Company was able to integrate TSS as part of our marketing arm for introducing and marketing new value-added asphalt products and new paving techniques under the banner of Tipco Asphalt Group. By strengthening our sales force with full knowledge of product, technology and most importantly customer concerns and requirements, the Company is convinced that it will result in higher asphalt sales going forwards.

The Company will also be able to provide stronger support to the construction of the 3rd runway of the Suvarnabhumi International Airport project undertaken by our construction group together with its joint venture partner since 2020. As a market leader, the Group is committed to providing high quality asphalt products and technical support to our customers through continuous investment and innovation in our R&D center and in our logistic delivery capability.

In October 2021, our KBC refinery received the final insurance compensation of Baht 271 million relating to the fire incident at KBC in 2018.

In committing to corporate governance and sustainable development, I am pleased to announce that the Company has received many honorable awards including the "Excellent" CG scoring (5-star) accorded by the IOD for four consecutive years; the "Sustainability Excellence Award: Highly Commended" and "Outstanding Company Performance Award" in the group of listed companies with market capitalization between 10,000-30,000 million Baht from the Stock Exchange of Thailand for two consecutive years; inclusion in the Thailand Sustainability Investment Index (THSI Index) for four consecutive years; the Sustainability Disclosure Award in 2021 for three consecutive years; and recertification of Private Sector Collective Action against Corruption ("CAC") since 2020.

In summary, it is my pleasure to inform our shareholders that the Board has proposed to the 2022 Annual General Meeting a total dividend payment of Baht 1.05 per share, equating to a full year payout ratio of 75% of net consolidated profit of the Group. This high dividend payout ratio once again confirms our commitment to distributing the highest possible total return to shareholders, as evidenced by the Company's being included in the SET High Dividend ("SET HD") index for several years.

Finally, on behalf of the Board of Directors, I would like to extend my gratitude to all shareholders and stakeholders of the Company for their continuous support. I would also like to thank our management and staff for their dedication, initiative and hard work. Their team spirit, integrity, prudence, commitment, and open-minded attitude in performing their duties are all very much appreciated.



MR. CHAINOI PUANKOSOOM

Chairman



FINANCIAL HIGHLIGHTS

Unit : Million Baht	2017	2018	2019	2020	2021
Financial Highlights					
Total Revenue ^{1/}	28,598	27,742	37,026	26,291	27,210
Gross Profit	3,479	2,364	4,174	5,555	3,882
EBITDA ^{2/}	4,491	2,443	3,940	5,591	4,009
Net Profit	2,537	564	3,123	3,592	2,220
Assets	19,513	24,253	25,262	21,334	24,801
Liabilities	6,583	11,716	11,683	6,314	8,864
Shareholders' Equity	12,929	12,537	13,579	15,021	15,937
Financial Ratio					
Total number of shares issued (shares)	1,562,464,570	1,573,821,570	1,576,763,070	1,578,361,570	1,578,361,570
Book value per share (Baht)	8.19	7.87	8.50	9.40	9.74
Earnings per share (Baht)	1.62	0.36	1.98	2.28	1.41
Dividends per share (Baht)	1.20	0.30	1.50	1.60	1.05 ^{3/}
Net profit margin (%) ^{4/}	8.94%	2.09%	8.50%	13.68%	8.28%
Return on equity (%)	20.33%	4.48%	24.22%	25.43%	14.70%
Return on assets (%)	15.55%	4.50%	15.59%	19.25%	13.54%
Debt to Equity Ratio	0.51	0.93	0.86	0.42	0.56

1/ Include other income

2/ Equal to profit from operating activities before change in operating assets and liabilities of financial statements

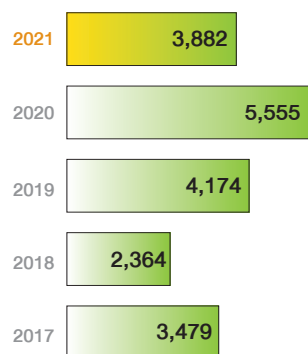
3/ Final dividend of 0.80 Baht per share is subjected to approval at 2022 Annual General Meeting

4/ Net profit include equity holders of the Company and Non-controlling interests of the subsidiaries

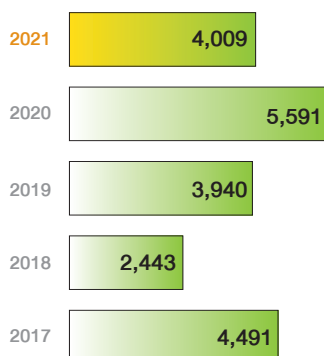
5/ Exchange rate in 2017, 2018, 2019, 2020, and 2021 were 33.94, 32.31, 31.05, 31.29 and 31.98 Baht per USD, respectively

FINANCIAL HIGHLIGHTS (THB MILLION)

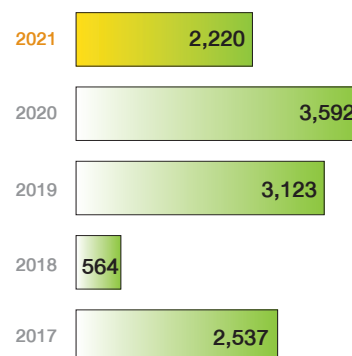
Gross Profit



EBITDA^{1/}



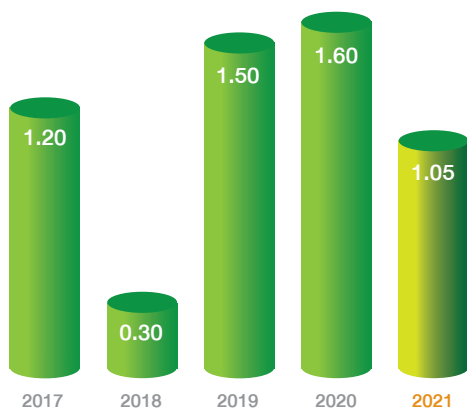
Net Profit



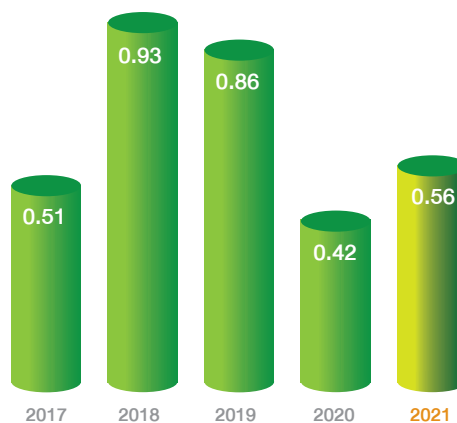
^{1/} Equal to Profit from operating activities before change in operating assets and liabilities of financial statements

FINANCIAL RATIOS

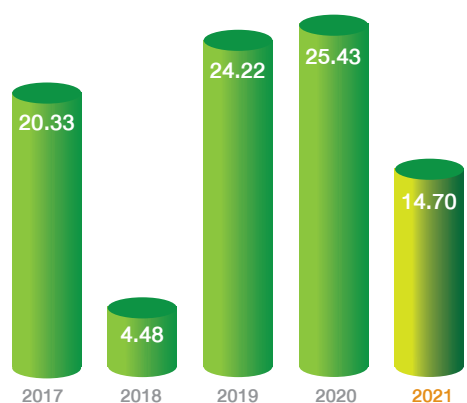
Dividend per Share (Baht)



Debt to Equity Ratio



Return on Equity (%)



Return on Assets (%)



Part 1 :

Business Operation and Operating Results

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1. Group Structure and Operation

1.1 Policy and Business Overview

1.1.1 Overview of the Mission, Vision, Goals/ Objectives. and business strategies

The Group has set out a long-term corporate strategy as a guideline for its business direction since 2010. The strategic corporate strategy plan, revisited every 5 years, focuses on the formulation of our Mission/Vision statements, core values, culture and on the development of strategic goals/ objectives supported by a set of strategic initiatives to make sure our long-term Mission/Vision can be met while ensuring our businesses remain resilient to cope with any challenges/ risks encountered.

The current strategic corporate strategy plan, **Vision 2025**, was formulated by taking into consideration all relevant factors in the context of the Group's business outlook, key issues of interests/expectations by stakeholders, and constantly changing business environments including potential risks and opportunities that may arise to ensure sustainable value creation for the organization, related stakeholders, the environment, and society at large. This business direction is implemented through coordinated plans and resource allocation in different business functions and processes across the Group governed by regular monitoring by the Board of Directors and top management.

As our core DNA focuses on high resiliency in the face of any potential risks or new market shocks, strategic reviews are also conducted on a regular basis. Top management, together with key unit heads and Corporate Strategy teams, consider market development, business outlook, and macro trends including key risks. Market scenarios are then simulated, and the Group revises its strategic initiatives accordingly.

MISSION

TO BE A GLOBALLY PREFERRED INTEGRATED ASPHALT SOLUTIONS PARTNER

VISION 2025

TO PROVIDE ASPHALT SOLUTIONS IN A SUSTAINABLE MANNER LED BY AN INNOVATIVE CULTURE

STRATEGIC GOALS/ OBJECTIVES

For the successful achievement of our Mission and Vision statements, the Group has crystallized its targets into 6 corporate goals/ objectives while also integrating sustainability into their design. These goals served as directional guidelines for all units across the Group.

1. *"A Truly Global Entity"* The Group aims to be recognized as the industry leader embodying and practicing global standards
2. *"Diversified Portfolio of Solutions"* The Group's key focus will be on delivering a diversified portfolio of solutions to serve the needs of all customers
3. *"Innovation Beyond Product"* The Group plans to instill an innovative culture within the organization to improve the efficiency of our processes and services
4. *"Client Centric"* One of the Group's core strategic goals with the aim to exceed customers' expectations through the anticipation of their future needs
5. *"Data Driven Organization"* With data/information that the Group has compiled over the years, we aim to optimize business intelligence for efficient decision making

6. “Sustainable Organization” In the long run, the Group will become a sustainable organization through the promotion of innovative ideas, eco-efficiency, and a safety mindset

Each strategic goal is accompanied by a set of strategic initiatives or projects to be executed and monitored across the Group to ensure the successful implementation of Vision 2025. The Corporate Strategy team is responsible for following up on the progress and target performances of these strategic goals and initiatives, providing reports to top management on a regular basis.

Core Values

The Group has long adopted a set of Core Values focusing on *Teamwork, Integrity, Prudence, Commitment* and *Open-minded* attributes.

Teamwork focuses on mutual trust, and on the collective application of individual strengths to achieve team objectives.

Integrity is a key trait of the Group and pertains to abiding by the laws in the many countries we operate in and adhering to industry best practices.

Prudent concentrates on the Group’s ability to approach risks with careful consideration, and with accountability of potential consequences.

Commitment is shown through the Group’s actions to match the needs of our stakeholders and organization, and make them one.

Open-minded makes the Group adaptable to change and willing to cultivate diverse ideas without fear of change.

Innovative Culture

The Group aims to become an innovation-driven organization. Innovation is defined as a way of achieving our goal of sustainable development. It is cultivated by combining several types of knowledge and technology to build solutions with high value that will positively impact customers and our business ecosystem.

BOARD OF DIRECTORS AND CORPORATE STRATEGY

The Board of Directors plays a crucial role not only in the formulation of the Group’s Corporate Strategy, but also in monitoring its progress. Details are as follows:

In December 2019, members of the Board of Directors participated in the Vision 2025 Corporate Strategy Workshop, set up to lay out a long-term corporate strategy plan for 2020–2025. A new set of Mission/Vision statements was formulated for the Group, with new strategic goals/initiatives proposed to accommodate the new strategic direction.

In 2020, the new Vision/Mission statements and corporate strategy plans were proposed by top management to the Board of Directors for their review and approval. Since then, all key strategic initiatives and action plans have been implemented and closely monitored on a regular basis by the Corporate Strategy team, with progress reports presented to the Board of Directors for their acknowledgement and suggestions.

In 2021, corporate strategy review sessions were conducted to assess any strategic initiatives that may have been affected by the volatility of external conditions, to ensure their continued success. The results from these corporate strategy review sessions were communicated across the Group to ensure all staff members fully understood the new

strategic direction, so that they could then revise their corresponding operation/business plans and targets (both financial and non-financial) accordingly. The Corporate Strategy team also presented all strategy review progress to the Board of Directors for their acknowledgement.

1.1.2 Major changes or developments in 2019 – 2021

2019

- The 2019 Annual General meeting on 5th April 2019 resolved the amendment of Clause 47 of the Articles of Association regarding the new company seal with the following details:



The new Company seal took effect on 11th April 2019.

- The Board of Directors meeting No.4/2019 on 13th August 2019:
 - Acknowledged the resignation of Mr. Somchit Sertthin as Chief Executive Officer, and resolved to appoint Mr. Chaiwat Srivalwat as his replacement as the new Chief Executive Officer with effect from 13th August 2019. This was in accordance with the Company's succession plan which is reported to the Board of Directors on a regular basis.
 - Resolved to approve the distribution of interim dividend payments to shareholders for the performance period from 1st January 2019 - 30th June 2019 equivalent to Baht 0.4 per share, totaling Baht 630.55 million. The dividend payments were made on 6th September 2019.

2020

- The Board of Directors meeting No. 2/2020 on 14th February 2020 resolved to
 - Appoint Mr. Chainoi Puankosoom and Mr. Koh Ban Heng as Chairman and Vice Chairman of the Board respectively with effect from 15th February 2020 with 2-year terms each.
 - Acknowledge the resignation of Mr. Herve Le Bouc as director with effect from 17th February 2020.
 - Appoint Mr. Hugues de Champs in replacement of Mr. Herve Le Bouc as the new director with effect from 17th February 2020.
- The 2020 Annual General meeting on 7th April 2020 approved the final dividend payment for 2019 performance of Baht 1.10 per share in the amount of Baht 1,734,769,377. The final dividend payments date were made on 24th April 2020.
- On 11th September 2020, the Company notified the Stock Exchange of Thailand ("SET") that it would "Wind down its crude oil procurement from Venezuela"
- On 15th September 2020, the Company notified the SET that it was in the process of considering various mitigation initiatives such as sourcing alternative crude oil/feedstock and procuring asphalt from regional refineries to support its international trading activities.

- On 23rd November 2020, the Company notified the SET that it had completed its winding down of crude procurement from Venezuela following a request from the US State Department.
- The Board of Directors' Meeting No. 4/2020 resolved to approve the distribution of interim dividend payments to shareholders for the performance period from quarter 1 and 2/2020 equivalent to Baht 0.3 per share, totaling Baht 473 million. The dividend payments were made on 11th September 2019.

2021

- The Board of Directors' Meeting No. 1/2021 resolved to approve that the Company to increase its shareholding in Thai Slurry Seal Company Limited ("TSS") from 25 percent of total issued and paid-up shares to 62.5 percent of total issued and paid-up shares ("The Transaction"). The Transaction will enable the Company to increase its involvement in the road construction and maintenance business, an initiative which will enhance the growth and prospect of the domestic business of the Company. In addition, the Transaction will increase the future business potential and support the Mission and Vision of the Company.
- The Board of Directors' Meeting No. 1/2021 resolved to approve the distribution of interim dividend payments to shareholders for the performance period from quarter 3/2020 equivalent to Baht 0.3 per share, totaling Baht 473 million. The dividend payments were made on 9th February 2021.
- The 2021 Annual General Meeting resolved to approve the final dividend payment of 1.00 per share, totaling Baht 1,578,361,570. The dividend payment was made on 28th April 2021.
- The 2021 Annual General Meeting resolved to approve the reduction of the Company's registered capital from Baht 1,579,883,570 to Baht 1,578,361,570 by cancelling 1,522,000 registered but unissued shares of the Company with a par value of Baht 1 per share reserved to accommodate the conversion of warrants issued under the Employee Stock Option Program (ESOP) W1-W5.
- The Board of Directors meeting No. 4/2021 on 11th August 2021 approved the payment of interim dividends to shareholders of Baht 0.25 per share or totaling Baht 394,590,393 for the performance period from 1st January 2021 to 30th June 2021. The dividend payment was made on 9th September 2021.

1.2 Business Description

The Tipco Asphalt Public Company Limited was first listed in the Stock Exchange of Thailand in 1992. The Group's Vision 2025 is "to provide asphalt solutions in a sustainable manner led by an innovative culture", while its Mission is "to be a globally preferred integrated asphalt solutions partner". We commit to "deliver innovative solutions for the sustainable living of all societies".

The Company, its subsidiaries, joint ventures, and associated companies ("the Group"), are leading manufacturers and distributors of asphalt products for repairing, maintaining and constructing road pavements, highways and airport runways in Thailand and the Asia-Pacific region. Its asphalt products are sold to importers and road contractors in Africa, Australia, and North America.

The Company also sells non-asphalt products, such as naphtha, gas oil and fuel oil, from its asphalt crude refining process to oil traders and refineries in Thailand, Singapore, and Malaysia.

Thanks to the cooperation of one of its major shareholders, Colas S.A. of France ("Colas"), a world leader in the construction and maintenance of transport infrastructures, the Group is able to deliver the highest quality asphalt products and innovative road pavements to its customers.

As the market leader in Thailand, the Company's objective is to increase the sales proportion of high-margin products in the Thai markets. With this aim in mind, the Company invested in TSS to help the construction group become more competitive and secure more construction projects. Above all, this acquisition allowed the Company to complete its value chain for the asphalt business.

1.2.1 Revenue Structure

In 2021, domestic and international sales volumes contributed to approximately 42% and 58% of total sales volumes, respectively. 88.98% of total revenue came from sales of asphalt and petroleum related products.

Based on the Company's consolidated financial statements for the years 2019, 2020 and 2021, revenues categorized by companies were as follows:

	Shareholding (%)	2019		2020		2021	
		Unit million	%	Unit million	%	Unit million	%
Tipco Asphalt PLC.		26,868.94	71.69	18,059.76	68.52	15,243.77	55.89
Thai Bitumen Co., Ltd.	99.99	1,564.77	4.17	1,426.10	5.41	1,722.74	6.32
Raycol Asphalt Co., Ltd.	99.99	610.26	1.63	535.78	2.03	504.38	1.85
Ravana 1020 Co., Ltd. ^{1/}	99.99	-	-	-	-	1.77	0.01
Tipco Asphalt (Cambodia) Co., Ltd.	100	563.48	1.50	568.80	2.16	617.89	2.27
KOC and KBC and subsidiaries	100	1,990.24	5.31	1,270.48	4.82	1,311.86	4.81
TIH and subsidiaries	100	1,290.23	3.44	1,285.93	4.88	1,558.15	5.71
Highway Resources Pte Ltd. and subsidiaries	100	2,109.03	5.63	1,969.98	7.47	2,162.65	7.93
PT Asphalt Bangun Sarana Group	99.99	1,692.80	4.52	868.48	3.30	1,045.80	3.83
Tipco Asphalt Lao Co., Ltd.	75	203.22	0.54	159.17	0.60	101.16	0.37
Total		36,892.97	98.43	26,144.48	99.20	24,270.17	88.98
Marine Group							
Tipco Maritime Co., Ltd.	99.99	4.83	0.01	3.03	0.01	2.55	0.01
Delta Shipping Co., Ltd. ^{1/}	99.99	56.95	0.15	-	-	-	-
Alpha Maritime Co., Ltd.	99.99	121.28	0.32	160.86	0.61	226.24	0.83
Bitumen Marine Co., Ltd.	99.99	248.20	0.66	267.53	1.02	276.65	1.01
Tasco Shipping Co., Ltd.	99.99	286.36	0.76	342.09	1.30	349.47	1.28
AD Shipping Pte. Ltd.	100	104.54	0.28	251.00	0.95	102.41	0.38
Reta link Pte. Ltd.	100	69.64	0.19	1,176.94	4.47	341.26	1.25
Pacific Bitumen Shipping Pte. Ltd.	100	241.94	0.65	242.66	0.92	268.38	0.98
Elimination		(1,133.74)	(3.02)	(2,433.32)	(9.23)	(1,557.88)	(5.71)
Total Marine group after eliminate		0.00	0.00	10.79	0.04	9.08	0.03
Construction Group							
Thai Slurry Seal Co., Ltd. ("TSS")	62.50	-	-	-	-	403.98	1.48
Thanomwong Co., Ltd.	(99.99 by TSS)	-	-	-	-	2,369.55	8.69
Total		-	-	-	-	2,773.53	10.17
Total Sales and services income		36,892.97	98.43	26,155.27	99.24	27,052.78	99.18
Other Revenue income		587.23	1.57	200.14	0.76	223.88	0.82
Total income		37,480.20	100.00	26,355.41	100.00	27,276.66	100.00

Note: Excluded profit (loss) from investment in joint ventures and associated companies.

1/: This Company was formerly named as Delta Shipping Co., Ltd.. Its name was registered to be changed to RAVANA 1020 COMPANY LIMITED.

1.2.2 Product information

1.2.2.1 Characteristics of products or services and development of business innovation.

Products produced by the Group include

- Asphalt Cement (“AC”): Our refinery in Malaysia refines crude oil to produce AC, which accounts for approximately 75% of total refinery output. There are various grades of asphalt which are AC 20/30, AC 40/50, and AC 60/70. The quality of AC from our refinery is superior to that from other refineries.
- Asphalt Emulsion (“AE”) is a mixture of AC, water and chemicals. AE is environmental friendly as it removes oil evaporation into the atmosphere from the manufacturing process. The Company offers various grades of AE for different applications. Emulsified Asphalt Prime (“EAP”) was developed to replace Cutback asphalt as it dries and absorbs into pavements faster. These products reduce the working period of road construction and maintenance.
- Cutback Asphalt is a mixture of AC and petroleum solvents. It is used mainly for prime coating on surface pavements and for maintenance. Nonetheless, Cutback asphalt has become less popular due to its higher production costs, flammability, and considerable environmental impact.
- Polymer Modified Asphalt (“PMA”) is a premium-grade asphalt mixture of AC and polymer compounds. PMA quality is superior to that of regular AC in terms of its higher softening point, elastic recovery, cohesion, toughness and tenacity. These characteristics make for greater rutting resistance on highways. Once applied to the surface pavement of highways and airport runways, PMA helps extend the useful life of roads and runways longer than AC can.
- Natural Rubber Modified Asphalt Cement (“Para AC”) is a mixture of AE and Concentrated Latex. Para AC is better suited for construction and maintenance in areas with high traffic density. The Company was the first to successfully manufacture Para AC by using concentrated latex with Ultra-low Ammonia. This reduces odor, and eliminates pollution during production and application.
- Modified Asphalt Emulsion is a mixture of AE, water, chemicals, and concentrated latex. The product application is similar to that of Para Slurry Seal. The key benefit is its higher skid resistance on road surfaces, meaning it can also be used for pothole repairs to extend the useful life of roads and ultimately enhance road safety. The Company offers various grades of Modified Asphalt Emulsion, e.g., CRS-1P, CRS-2P and CMS-2hP which have superior quality to AE.
- Tipco Premix is an instant, ready-mixed, ready-for-use product that is sold in 20 kg retail packages. Premix is made from selected aggregates (with proper gradation), readily mixed asphalt emulsion and some additives, all of which promote extra bonding properties. Premix products are ideal for road surface repairs, potholes and other small road projects.
- Tipco Joint Sealer and Tipco Joint Primer both refer to AC mixed with polymer, which offer extra durability under extreme weather conditions. Both sealer and primer exhibit high properties of flexibility while adhering strongly to joint components. Both Sealer and Primer can be used to seal joints between concrete slabs. “Top Joint” is the Company’s Joint Sealer which is designed for comprehensive application.
- Petroleum products: Kerosene, Naphtha, Atmospheric Gas Oil (AGO), and Vacuum Gas Oil (VGO) are by-products of the KBC refinery in Malaysia. These products are distributed directly to local and Asia Pacific regional customers.

1.2.2.2 Marketing and competition

ASPHALT REFINERY AND OPERATIONS IN MALAYSIA

Tipco Asphalt operates an Asphalt refinery which is designed to process high total acid number (“TAN”) heavy crude oil at a capacity of 30,000 bbl/day and produces various grades of high-quality Asphalt, Atmospheric Gas Oil (AGO), Vacuum Gas Oil (VGO), Kerosene and Naphtha. During the year, the refinery produced 495,257 tons of high-quality Asphalt and 200,445 tons of non-Asphalt products. The throughput has been considerably lower than in previous years, mainly due to the impacts of the Covid-19 pandemic on overall economic activity, and to the limited availability of suitable feedstock for the refinery.

Despite the challenging situation in 2021, the KBC team focused on ensuring the refinery operated at the same standards as those reflected in the plant’s past plant-reliability rate of 99.66%. The Company continues to benchmark its operations against best practices as evidenced by the ISO 9001 and ISO 14001 certifications that have been renewed by the relevant agencies up to 1st September 2024. The latest ISO 45001:2018 Occupational Health and Safety Management System certification achieved by the KBC in September 2020 has also been renewed up to 3rd September 2024.

The refinery takes risk management in all its operations with the highest level of vigilance. Following the fire incident in 2018, the refinery infrastructure has been restored and improved while maintaining the highest operating standards. The Refinery’s Fire-Safety Design Philosophy (FSDP) has also been closely reviewed with the help of internationally accredited consultants under the supervision of the Malaysian Fire-Safety department (BOMBA). All resulting recommendations have been implemented, leading to all-round improvements in the refinery’s safety procedures, preparedness, and infrastructure.

Through constructive collaboration with the insurers, KBC has achieved closure of the insurance claims arising out of the accident in 2018. The Material Damage and Business Interruption claims were fully and satisfactorily settled with the final payment received in October 2021.

Going forward, the refinery continues to manage its feedstock situation carefully and is working in close coordination with Tipco Asphalt Public Company Limited, Thailand to try and secure suitable feedstock supplies that would ensure optimal business continuity.

The impact of Covid-19 was felt significantly, particularly in the local bitumen market. Road construction activity in the country was affected as it rushed into various levels of lockdown throughout the year to control the spread of the pandemic. Also, as the Tipco Asphalt Group tried to balance all its international sales commitments against the limited product availability from the KBC refinery, the domestic sales volumes in Malaysia dropped to 90,732 metric tons in the year compared to 110,000 MT in the previous year. That said, Borneo Asphalt Sdn Bhd (BASB), the joint venture company established by KBC in the State of Sarawak, recorded very good sales of 20,323 metric tons in its first full year of operations under very challenging conditions

THAILAND MARKET

As a market leader in Thailand, the Company has continued to successfully maintain customer confidence and trust through its excellent-quality products, superior-customer services, prompt deliveries and continuous efforts on product and service innovation. To continue improving service quality, every year the Company conducts in-depth interviews with our customers regarding our products and services. The 2021 interviews still confirmed the Company’s position as the leader for asphalt products and services in Thailand across all areas. We have preserved our competitive edge through our client-centric approach in sales & marketing, reliability as a key solution partner, strong technical knowledge, and our digital order-fulfillment platform.

2021 was another tough year for the asphalt industry in Thailand. There were many challenging factors including delays in government budget disbursement and the effects of the Covid-19 pandemic on government policy related to Asphalt Cement. Having said that, in 2021 the total demand for all asphalt products in Thailand stood at approximately 1.4 million tons, representing a small growth compared to 2020's figures.

Logistic management was the key success factor when 2021 asphalt demand fluctuated due to delays in government budget disbursement, and when approximately 50% of operations and transportation personnel were required to work from home in accordance with precautionary measures against the Covid-19 pandemic. Our Thailand operations team prepared and adhered to the business continuity plan and emergency response plan for all plants by dividing the operations team into 2 groups which allowed continuity and effectiveness on all operations. Despite operational difficulties, the operations team still delivered their high-performance standard by maximizing production capacity, optimizing inventory and production plan, controlling costs of production and transportation effectively, and delivering products on time as per customer requests.

Another challenge was the change in government policy focus from natural latex modified asphalt to AC 40/50 penetration specification. The centralized logistics team could proficiently manage all the trucks, trailers, and drivers for all 5 plants, together with outsourced logistics providers, to serve customer needs with lower fixed assets and transportation costs. With a lower number of trucks, trailers, and drivers, we still broke the second highest ever record of monthly producing and delivering products to customers in March 2021.

In our commitment to sustainable development, the Company is delighted to announce that the 3 of our 5 plants in Thailand have been awarded the Green Industry ("G.I.") 4 certifications from the Ministry of Industry. In addition, all Thailand plants are practicing "Total Productive Maintenance" to develop multiskilling and multitasking in all of our employees. Finally, the Company is upgrading our digital platform to cope with digital disruption, and is exploring other road-related businesses to forecast future trends and changes.

Construction Business

The Company has invested in 2 construction business entities – Thai Slurry Seal Company Limited ("TSS", leading road rehabilitation contractors, and Thanomwongse Service Company Limited ("TWS"), the Special Class Contractor, with the objective of expanding the Company's business into regional construction business. This was in accordance with the Mission of the Company to be "a globally preferred integrated asphalt solution partner".

With TSS and TWS, the construction business covers all type of works related to road construction and maintenance. Moreover, the Company has benefited from utilizing the construction business in its own marketing to introduce new value-added products and developed techniques to the public and private sectors. Such initiatives have led to higher overall profit margins for the Company, now able to increase the sales proportions of high-margin products.

Very well-recognized in the airport pavement sector, the 2 companies combined have currently between them several projects all around the country with the Airports of Thailand Plc. ("AOT") and the Department of Airports ("DOA"), for airfield pavement maintenance or new runway and taxiway construction. One of the most notable projects is the construction of the new 3rd runway in Suvarnabhumi International Airport that TWS started in September 2020, in collaboration with Nawarat Patanakarn Public Company Limited. This mega project will ensure a good level of activity for the next 3 years.

In 2021 the level of activity sharply increased thanks to the development of the construction business in the Northern region along with the new airport projects. The construction business proactively and consistently seeks out opportunities in both the public and private sectors. At the end of 2021, the construction business was holding an important order book, and business will continue to grow in 2022.

In 2021, the construction business continued to face challenges related to uncertainty regarding government budgets for road maintenance and construction, which resulted in difficulties in managing and planning resources to meet customer requirements effectively and efficiently. By leveraging its strong expertise in all types of road maintenance and construction techniques and combining these with Tipco Asphalt's strengths, the construction business overcame challenges it faced through a diversifying strategy founded on acquiring many road projects throughout the year from various customers/sectors. This strategy paved the way for more opportunities to collaborate with other players in the construction industry and will also yield long-term growth.

Going forward, the construction business continues to develop its capacity with the latest machinery, equipment, technologies and human capital expertise, and will ultimately be able to undertake projects of all sizes and complexities in the future.

With strong technical expertise and know-how, a good reputation among its customer-base, a growing network of partners for targeting big-mega projects, continued investment in machinery and human capital development, and the support of the Tipco Asphalt Group, the construction Group is well on its way to becoming a major player in the road construction market.

INTERNATIONAL MARKETS

The combined impacts of the Covid-19 pandemic and crude fluctuation in 2021 made demand and prices volatile across international markets throughout the year. Overall, there was a significant reduction in regional flows, mainly due to the sharp drop of China imports. Apart from the Philippines and New Zealand, most asphalt-importing countries saw their imports fall compared to 2020's figures. Competition remained fierce with importers and local customers carefully scheduling their procurement.

In this environment, the Company volumes followed a similar trend while maintaining or strengthening its positions on its retail markets. While being mindful across all our international markets, the key strategy remained being selective by focusing on best value territories and their related customers. Despite numerous constraints related to Covid-19, Vietnam and the Philippines performed particularly well, while Indonesia managed to significantly improve its performance.

Indonesia

Overall, Indonesia's import asphalt market volume decreased by 17% in 2021 due to the continuous impact of the Covid-19 pandemic along with a reduction in government spending on infrastructure projects. In the Sumatra and Kalimantan Islands specifically, asphalt market demand decreased due to the severity of the pandemic, the resulting restrictions on movements, the fluctuation of crude oil pricing, and price competition within the local market.

The market demand reduced by 2% due to the abovementioned factors. However, PT Asphalt Bangun Sarana ("ABS"), the Group's subsidiary, managed to maintain sales volumes at the same level as per last year despite delays in some government projects and unfavorable weather conditions in the country. This provided ABS a privilege to be in the top 5 importer and local refinery. In line with the Company's 2021 Strategies, ABS has sharply increased the sales volumes of its PMA product, optimized operational costs, and improved financial risk management, all of which helped to improve ABS's profitability and working capital management.

Vietnam

The Vietnam asphalt import market decreased by 4% in 2021 due to the delays of key expressways projects. Despite slightly lower sales volumes, Asphalt Distribution Company Limited ("ADCo"), the Group's subsidiary, achieved its third-best financial performance while reaching a top 3 market position in 2021. This was mainly thanks to leveraging on

the Group's R&D knowhow and expertise. Moreover, ADCo has continued its efforts to promote high-performance pavement solutions and low carbon footprint solutions to the Transport Authority of Vietnam.

China

Due to budget constraints, the government's infrastructure plan No.14 moved slower than expected. The asphalt market demand in China decreased by 8% in 2021, with bulk imports alone dropping by 35%.

Tight asphalt supply from our refinery throughout the year heavily impacting our trading activity. Nevertheless, the retail business activity of our Chinese subsidiary maintained its sales volumes and delivered a good financial performance overall.

Cambodia

Despite timely measures made by the government in 2021 to contain the Covid-19 pandemic, the Cambodia asphalt import market reduced by over 16% this year due to delays in national road projects (new and under maintenance programs). Thanks to a stable sales volume, our subsidiary Tipco Asphalt (Cambodia) Co., Ltd. ("TAC") managed to increase its market leadership position despite stronger competition from Thailand and Vietnam borders' trade and delivered a good financial performance.

The Philippines

The local construction industry grew by 9.6% despite the various lockdowns imposed by the government in 2021 due to the pandemic. These lockdowns affected various infrastructure projects in the country, but key road projects were nonetheless completed in time for the full opening of the economy. Given the strong demand for asphalt, the total asphalt industry grew by 50% compared to 2020 when Phoenix Asphalt Philippines Inc., ("Phoenix") grew by 48%. This translated into a 2% increase in volume import shares, with Phoenix taking the third spot nationwide out of 4 players.

As a result, Phoenix yielded positive financial results for its second year of operations closing 2021 on a high note. PAPI will continue its efforts in 2022 to promote high-performance asphalt solutions to the toll roads segment in Luzon Island.

THE MARINE GROUP

The Marine Group owns, manages, and operates a fleet efficient and reliable asphalt carriers with a total tonnage of 42,902 MT DWT and an average age of 13 years.

Our full in-house ship-management subsidiary, Tipco Maritime Co., Ltd., is a strategic subsidiary for our tanker asset profitability, allowing the Group to have full control of our marine logistics activities, maintenance, and cost efficiency. As for safety, Tipco Maritime Co, Ltd. successfully maintained OCIMF/VIQ of 3.5 average observations per tanker and Tanker Management and Self-Assessment ("TMSA") score of 2.5.

The Marine Group has shown true resilience during one of its most challenging years in relation to crew management amidst the Covid-19 pandemic. From March 2020 to the end of 2021, we saw all countries around Asia and the globe close their borders and forbid ship berthing in response to the outbreak of the pandemic. Thanks to proper measures and detailed planning, all TMC seafarers were properly taken care of, avoiding unnecessarily prolonged stays onboard with no Covid-19 infections incurred. There were no significant operational delays and no business disruptions recorded. The Marine Group proved to be resilient and successfully adapted to even the most challenging of operational environments.

The Marine Group also followed-up on each of our seafarers' families during the whole of 2021, providing support and assistance. This reassured our crew members, knowing that their families were taken care of. We concurrently established a campaign to manage seafarers' stress levels onboard through a mental health monitoring program. The V-sat communication systems were installed and broadband enhanced enabling 24/7 communication between seafarers and their loved ones. This helped identify and manage early signs of stress and fostered a closer relationship between ship and shore.

The Marine Group managed to arrange a full Covid-19 vaccination scheme for our seafarers with 80% of the seafarers fully vaccinated (double shots) at the end of 2021. Ultimately, the Marine Group proved once again its resilience, both onboard and ashore, and we were able to manage our pool of seafarers to ensure no contracts were overdue across our fleet.

Finally, the Marine Group greatly contributed to maintaining the Group's asphalt logistic by proposing and implementing innovative logistical solutions in this challenging year.

1.2.2.3 Procurement of products or services

TYPES AND SOURCES OF RAW MATERIALS

One of the Group's key products is AC which is a refined product made from crude oil. In the past, the Group mainly purchased crude from Venezuela. Nevertheless, the Company has completed its wind down of crude procurement from Venezuela at the request of the US State Department, as of 23rd November 2020 according to the Reference to Company's letter no. Bor. Hor. 026/2020 dated 11th September 2020 to the Stock Exchange of Thailand. Currently, the Group has been purchasing crudes from various sources, with the business is operating as normal.

Another key product of the Group is premium products which include asphalt emulsion, cutback asphalt, polymer-modified asphalt, Natural Rubber Modified Asphalt Cement, etc. These products use Asphalt Cement as the main raw material for manufacturing. The Group currently sources its AC supply from its own asphalt refinery in Malaysia, along with other local and international refineries. This has mitigated the risks associated with reliance on a single source and has additionally enabled us to control the cost of the main raw material.

OTHER RAW MATERIALS

The Group imports chemicals used in the manufacturing of asphalt emulsion and polymer modified asphalt, representing around 3% of total raw materials used. The remaining 97% is sourced through local suppliers. The Group also purchases Ultra-low Ammonia locally, which allows us to produce environmental friendly natural rubber modified asphalt cement.

CHEMICALS CAN BE CLASSIFIED INTO TWO CATEGORIES AS FOLLOWS:

- Solvents: All solvents can be sourced locally, meaning there is little risk of raw material shortage. The market price of solvents fluctuates in line with the price of oil.
- Emulsifiers: The Group uses several kinds of emulsifiers, which can be imported from international suppliers through their authorized agents, or sourced locally. Market prices of emulsifiers are relatively stable.

PRODUCTS FOR WHICH THE GROUP SERVES AS DISTRIBUTOR:

- Asphalt Cement purchased from local and international suppliers
- Diesel oil purchased from oil refineries and traders
- Lubricant products such as engine oil, transmission fluid, hydraulic oil purchased from refinery in South Korea and traders.

The Group has integrated sustainable awareness into its procurement process to ensure the same spirit of environmental consciousness exists throughout the supply chain. Appropriate policies and procedures have been put into place to ensure this. The procurement criteria were established with a focus on environment, safety, human rights, transparency, and fairness, alongside the pre-existing procurement standards.

A team made up of representatives from various departments within the Group is sent on annual supplier visits to assess suppliers' operational practices relating to ESG issues, and to make sure they comply with the Group's standards of sustainable awareness. The Group is committed to sourcing green products, i.e., energy saving, environmentally-friendly and locally purchased products.

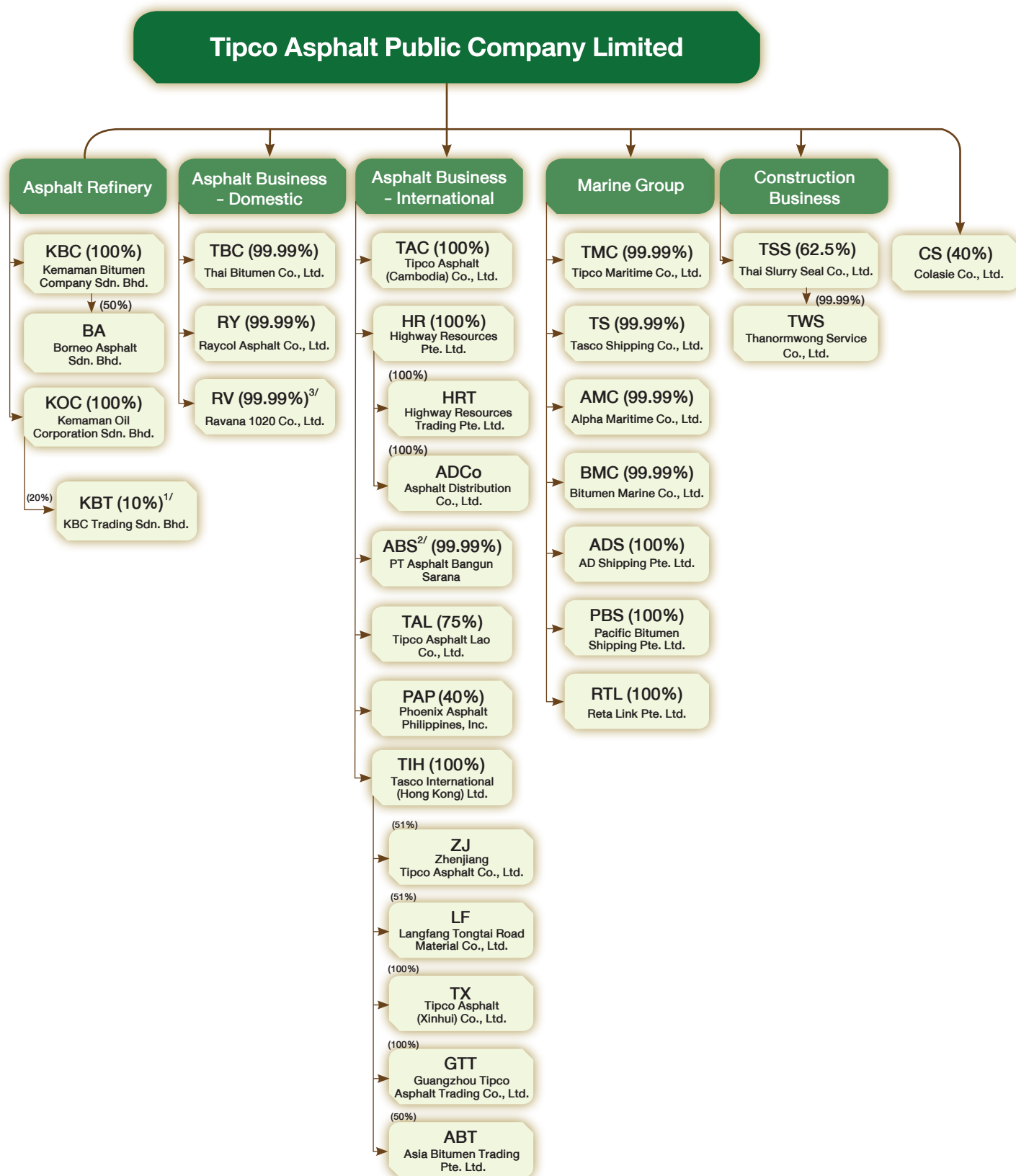
1.2.2.4 Under-construction projects

The details of undelivered work of the Company, its subsidiaries with the value exceeding 10 percent of the total revenue in the consolidated financial statements for the period ending December 31st, 2021, is as follows:

Project Name	Nature of Work	Project value (million Baht)	Commencement date	Completion date	% Remaining	Remaining Value (Million Baht)
3 rd Runway Suvarnabhumi Airport	Runway Construction	4,685	29-Sep-20	15-Aug-23	82%	3,842

1.3 Shareholding Structure

1.3.1 Shareholding Structure



1/ KBC Trading Sdn. Bhd. (KBT) was held 20% by Kemaman Oil Corporation Sdn. Bhd. (KOC) and 10% by Tipco Asphalt Public Company Limited

2/ PT Asphalt Bangun Sarana (ABS) holds 99.90% of ordinary shares in PT Saranaraya Reka Cipta (SRC) and 49% in PT Sarana Distribusi Aspal Nusantara (SDAN)

3/ This company was formerly named as Delta Shipping Co., Ltd.. its name was registered to be changed to RAVANA 1020 COMPANY LIMITED, on 30 April 2021.

Production Facilities, Oil And Asphalt Terminals



COMPANY INFORMATION

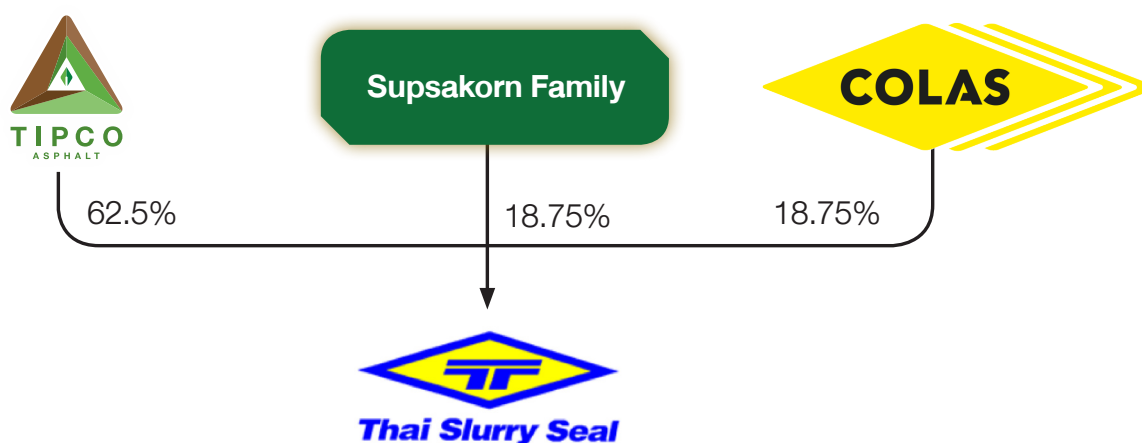
Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
SUBSIDIARIES COMPANIES							
Thailand	THAI BITUMEN CO., LTD.	Producer and distributor of asphalt product	123 Moo 3, Suratthani - Kanchanadit Road, Bangkung, Muang District, Suratthani 84000,	+66 7795 3030	3.75 million	Baht 375 million	99.99% held by Tipco Asphalt
Thailand	RAYCOL ASPHALT CO., LTD.	Producer and distributor of asphalt product	93 Moo 5 Makumkoo, Nikompattana District, Rayong 21180	+66 3889 3641-5	11.1 million	Baht 111 million	99.99% held by Tipco Asphalt
Thailand	BITUMEN MARINE CO., LTD.	Marine transportation	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	1.5 million	Baht 150 million	99.99% held by Tipco Asphalt
Thailand	ALPHA MARITIME CO., LTD.	Marine transportation	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	1.43 million	Baht 143 million	99.99% held by Tipco Asphalt
Thailand	TIPCO MARITIME CO., LTD.	Ship management and agency	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	0.02 million	Baht 2 million	99.99% held by Tipco Asphalt
Thailand	TASCO SHIPPING CO., LTD.	Marine transportation	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	2.9 million	Baht 290 million	99.99% held by Tipco Asphalt
Thailand	RAVANA 1020 CO., LTD.	Construction related materials, machine and service	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	0.8 million	Baht 80 million	99.99% held by Tipco Asphalt
Thailand	THAI SLURRY SEAL CO., LTD.	Road construction and maintenance service	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 3527 2609	4.97 million	Baht 497 million	62.5% held by Tipco Asphalt
Thailand	THANOMWONGSE SERVICE CO., LTD.	Road construction and maintenance service	118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400,	+66 2273 6000	2.5 million	Baht 2,500 million	99.99% held by Thai Slurry Seal Co., Ltd.
FOREIGN SUBSIDIARIES							
Malaysia	KEMAMAN BITUMEN COMPANY SDN. BHD.	Producer, refiner, supplier and distributor of asphalt and oil products in Malaysia	Unit No. 50-8-1, 8 th Floor, Wisma UOA Damansara, 50, Jalan Dungun, Damansara Heights, 50490, Kuala Lumpur, Wilayah Persekutuan, Malaysia	+603 5561 8500	316 million	Ringgit Malaysia 500 million	100% held by Tipco Asphalt
Malaysia	KEMAMAN OIL CORPORATION SDN. BHD.	Investment holding company, manufacturer of asphalt-related products and distributor of asphalt and oil products in Malaysia	Unit No. 50-8-1, 8 th Floor, Wisma UOA Damansara, 50, Jalan Dungun, Damansara Heights, 50490, Kuala Lumpur, Wilayah Persekutuan, Malaysia	+603 5561 8500	152 million	Ringgit Malaysia 255.7 million	100% held by Tipco Asphalt
Singapore	HIGHWAY RESOURCES TRADING PTE LTD.	Trading of Crude Oil, Petroleum and related products	9 Straits View #12-07/12 Marina One West Tower, Singapore 018937	+65 62495941	48.8 thousand	USD 48.8 thousand	100% held by Highway Resources Pte. Ltd.

Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
SUBSIDIARIES COMPANIES							
Hong Kong	TASCO INTERNATIONAL (HONG KONG) LTD.	Holding company for investments in China	Room 1103-12, 11 th Floor, Nan Fung Tower, 88 Connaught Road Central, Hong Kong	2532-3106	97.966 million	HKD 97.966 million	100% held by Tipco Asphalt
China	ZHENJIANG TIPCO ASPHALT CO., LTD.	Producer and distributor of asphalt product	10 Dongfang Dagang, Zhenjiang, Jiangsu, China	0511-8337-1939	-	RMB 20 million	51% held by TASCO International (Hong Kong) Ltd.
China	LANGFANG TONGTAI ROAD MATERIAL CO., LTD.	Producer and distributor of asphalt product	No.56, Quanxing Road, Langfang Economic Technology evelopment Zone, Hebei Province, P.R.China 065001	0316-6086751	-	USD 2.1 million	51% held by TASCO International (Hong Kong) Ltd.
China	TIPCO ASPHALT (XINHUI) CO., LTD.	Producer and distributor of asphalt product	23-11, Central Zone, Jinguzhou Economic Development Experimental Zone, Xinhui, Guangdong, P.R.China 529100	0750-6393636	-	RMB 30 million	100% held by TASCO International (Hong Kong) Ltd.
China	GUANGZHOU TIPCO ASPHALT TRADING CO., LTD.	Principally engaged in the trading asphalt products and asphalt future trading in Shanghai Bitumen Exchange	Room 1003, 1004, No. 334 Huanshi East Road, Yuexiu District, Guangzhou 510006 China	020-83634095	-	RMB 6 million	100% held by TASCO International (Hong Kong) Ltd.
Cambodia	TIPCO ASPHALT (CAMBODIA) CO., LTD.	Importer, manufacturer, distributor of asphalt-relate product	OHK tower, 6 th floor (L06-02), Street 110 and Corner Street 93, Phum 3, SangkatSrah Chak, Khan Daun Penh, Phnom Penh	0511-83371939	1 thousand	RIEL 20 million	100% held by Tipco Asphalt
Lao	TIPCO ASPHALT LAO CO., LTD.	Producer and distributor of asphalt product	Xoknoy Village, Saysettha District, VIENTIANE, LAO PDR	+856 21 262872-3	2.5 million	LAK 26,675 million	75% held by Tipco Asphalt
Indonesia	PT ASPHALT BANGUN SARANA	Importer, storer, manufacturer, distributor of asphalt and asphalt-related product	Head Office Gedung Graha Pratama, 19 th Floor, Jl. MT. Haryono Kav. 15, Jakarta 12810, Indonesia	+62 2 1837 09516	-	IDR 58,450 million	99.99% held by Tipco Asphalt
Indonesia	PT SARANARAYA REKA CIPTA	Importer, manufacturer, distributor of asphalt and asphalt-related product	Head Office Gedung Graha Pratama, 19 th Floor, Jl. MT. Haryono Kav. 15, Jakarta 12810, Indonesia	+62 2 1837 09516	-	IDR 58,450 million	99.90% held by PT Asphalt Bangun Sarana
Singapore	HIGHWAY RESOURCE PTE. LTD.	Holding Company for investments in Singapore and Vietnam	9 Straits View #12-07/12 Marina One West Tower, Singapore 018937	+65 62495941	4.78 million	SGD 4.78 million	100% held by Tipco Asphalt
Vietnam	ASPHALT DISTRIBUTION CO., LTD.	Importer, manufacturer, distributor of asphalt and asphalt-related product	12 th floor, Center building, No. 1 Nguyen Huy Tuong, Thanh Xuan Trung ward, Thanh Xuan district, Hanoi city	+84 243 934 1048	-	VND 135,362 million	100% held by Highway Resource Pte. Ltd.

Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
SUBSIDIARIES COMPANIES							
Singapore	AD SHIPPING PTE. LTD.	Ship owner and chartering services	9 Straits View #12-07/12 Marina One West Tower, Singapore 018937	+65 62495941	7.125 million	SGD 7.125 million	100% held by Tipco Asphalt
Singapore	RETA LINK PTE. LTD.	Ship Owner, shipping agent, forwarding service	9 Straits View #12-07/12 Marina One West Tower, Singapore 018937	+65 62495941	50 thousand	SGD 50 thousand	100% held by Tipco Asphalt
Singapore	PACIFIC BITUMEN SHIPPING PTE. LTD.	To own & operate ship and conduct related shipping activities	9 Straits View #12-07/12 Marina One West Tower, Singapore 018937	+65 62495941	39.5 thousand	USD 39.5 thousand	100% held by Tipco Asphalt
Malaysia	KBC TRADING SDN. BHD.	Supplier and distributor of asphalt product	A-06-3A, Empire Tower, Empire Subang, Jalan SS16/1, SS16, 47500 Subang Jaya, Selangor, Malaysia	+603 5635 0998	0.3 million	Ringgit Malaysia 0.3 million	20% held by Kemaman Oil Corporation Sdn. Bhd. 10% held by Tipco Asphalt Public Company Limited
JOINT VENTURE COMPANIES							
Singapore	Asia Bitumen Trading Pte Ltd.	Trader of asphalt products	9 Straits View, #12-07/12, Marina One West Tower, Singapore 018937	+65 6249 5930	10 thousand	SGD 10 thousand	50% held by Tasco Intl' (Hong Kong) Ltd.,
Malaysia	BORNEO ASPHALT SDN. BHD.	Manufacturer and distributor of asphalt and asphalt-related products in East Malaysia	Lot 7689-7690, Section 64, KTLD Jalan Pending, 93450 Kuching, Sarawak, Malaysia	082 496917	6 million	Ringgit Malaysia 6 million	50 % by Kemaman Bitumen Company Sdn. Bhd.
Phillipines	PHOENIX ASPHALT PHILIPPINES, INC.	Importer and manufacturer of asphalt	17 th Floor, UDENNA Towers, Corner Rizal Drive and 4 th Avenue, Bonifacio South District, Fort Bonifacio Global City, Taguig, Metro Manila Philippines	+632 403 4013	275 million	PHP 275 million	40% held by Tipco Asphalt
ASSOCIATED COMPANIES							
France	COLASIE CO., LTD.	Holding company for investment in Asphalt Emulsion and Polymer Modified Asphalt plants in India	7, Place Rene Clair F-92653 Boulogne - Billancourt France Cedex	N/A	1 million	EUR 1 million	40% held by Tipco Asphalt
Indonesia	PT SARANA DISTRIBUSI ASPAL NUSANTARA	Barge Rental Services	Head Office Gedung Graha Pratama, 19 th Floor, Jl. Mt. Haryono Kav. 15, Jakarta 12810, Indonesia	+62 2 1837 09516	-	IDR 1,000 million	49% held by PT Asphalt Bangun Sarana

1.3.2 Conflict of Interest

The Board of Directors' Meeting No. 1/2021 of the Company resolved and approved for the Company to increase its shareholding in Thai Slurry Seal Company Limited ("TSS") from 25 percent of total issued and paid-up shares, to 62.5 percent of total issued and paid-up shares of TSS. In determining this increase in the shareholding proportion in TSS, the Company considered TSS's business plan as well as the liquidity and working capital position of the Company. This transaction raised a conflict of interest issue for the future as it means the Supsakorn Family and Colas will still hold 37.5% of TSS between them.



Nevertheless, the Company will benefit from the increase in revenue contribution from the construction business (through the consolidation of activities), and from the expected rise in asphalt sales due to forecasted higher demand from TSS and TWS. This will also bring enhanced investment diversification to the Company. In addition, the transaction could increase future business potential and support the mission and vision of the Company.

As a result of the increase of shareholding proportion in TSS, the Company anticipates its greater involvement in the business operations of TSS in various areas, for example:

- (1) Reducing costs and risks in raw material sourcing,
- (2) Increasing TSS's creditability in project biddings,
- (3) Reducing the financial costs such as bank's fees, as TSS will become the subsidiary of a listed company that has a strong financial position, and
- (4) Enhancing the internal control system to improve operational efficiency.

Finally, the Company has set the check and balance measurements in every corporate structure level from the management, to directors and shareholders.

1.3.3 RELATIONSHIP BETWEEN THE MAJOR SHAREHOLDERS' BUSINESS GROUPS

The first group of major shareholders are Tipco Foods Plc. and the Supsakorn family, the founding shareholders. The other group is Colas S.A. of France, world leader in construction and maintenance of transport infrastructure. Colas became a 22.7% strategic shareholder of the Company in 2000. Shareholding currently stands at 31.1%. Through a Technical Assistance Agreement, the Company receives assistance on asphalt technology from Colas, including access to the latter's central asphalt research and development center in France, and to specialty asphalt products formulations and application techniques.

1.3.4 SHAREHOLDERS

1.3.4.1 MAJOR SHAREHOLDERS

The Company's top 10 major shareholders as of 31st December 2021 are as follows:

No.	Shareholder	No. of shares	%
1.	BNP PARIBAS SECURITIES (ASIA) PTE LTD - FOR COLAS	490,731,040	31.091
2.	Tipco Foods Plc	369,881,660	23.435
3.	Thai NVDR	73,941,520	4.685
4.	Supsakorn Family	106,605,000	6.754
5.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	24,861,128	1.575
6.	STATE STREET EUROPE LIMITED	16,180,000	1.025
7.	Mr. Pichit Lerdtamrub	10,103,400	0.640
8.	Krungsri Dividend Stock LTF	5,937,000	0.376
9.	N.C.B.TRUST LIMITED-NORGES BANK 1	4,889,493	0.489
10.	Mr. Pairat Varunvichit	4,500,000	0.285
11.	Others	470,731,329	29.824
	Total	1,578,361,570	100.000

DIRECTORS WITH AUTHORITY TO SIGN ON BEHALF OF THE COMPANY

The Authorized Directors who can bind the Company consists of two groups of Directors. Binding the Company requires one Director from Group A and another from Group B to jointly sign and affix the Company's Seal. The Directors in Group A are Mr. Frederic Gardes, Mr. Jacques Pastor, Mr. Hugues de Champs, and Mr. Jacques Marechal. The Directors in Group B are Ms. Laksana Supsakorn, Mr. Somchit Sertthin, Mr. Sitilarb Supsakorn and Mr. Chaiwat Srivalwat.

As of 31st December 2021, list of shareholders through Thai NVDR Co., Ltd. are summarized as follows:

No.	Shareholder	No. of shares	%
1.	N.C.B.TRUST LIMITED-NORGES BANK	36,693,300	2.325
2.	UBS AG SINGAPORE BRANCH	7,497,600	0.475
3.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	3,162,724	0.200

Shareholders through NVDR are entitled to receive dividend but excluded for voting right at the annual general meeting.

1.4 Registered capital and paid-up capital

1.4.1 The Company's registered capital amounted to Baht 1,578,361,570 of which Baht 1,578,361,570 was paid up. An equal number of common shares were issued at a par value of Baht one each.

1.5 Issuance of other securities:

N/A

1.6 Dividend Policy

The Company follows a policy of paying dividend of no less than 60% of the consolidated financial statement's net profit for each fiscal year. However, the actual dividend payment depends on cash flow, the investment plan of the Company, the terms and conditions of agreements entered by the Company, together with all other conditions of necessity and suitability in the future.

Details of the dividends paid (baht/share) for the past 5 years are as follows:

Unit : Baht	2017	2018	2019	2020	2021
Earning per Share	1.63	0.36	1.98	2.28	1.41
Dividend per share	1.20	0.30	1.50	1.60	1.05 ^{1/}
Payout ratio	74%	84%	76%	70%	75%

^{1/} Include the proposed final dividend of Baht 0.80 per shares, which is subjected to approval at 2022 AGM.

Dividend Policy for Subsidiaries of the Group

Tipco Asphalt Public Company Limited and its subsidiaries (the Group) are committed to practicing good corporate governance principles in conducting its business based on a philosophy of sustainable development. To ensure that the Group's shareholders are receiving the highest standard of considerations and maximum benefits from the investments made in the Group's subsidiaries, the following dividend payment policy is to be followed by all subsidiaries of the group.

1. All subsidiaries, who maintain a positive net cash position at the end of each financial year, must pay annual dividend of not less than 60% of the financial year net profit after tax deducting all tax and reserves to their respective shareholders.
2. Such dividend payment will be made after taking into consideration of the investment plan of each subsidiary for the following financial year.
3. The Group CFO shall have the final discretion

2. Risk Management

2.1 Risk Management Policy and Plans

The Group's business models are designed with resiliency against all business disruptions and market volatility. The identification and management of key potential risks are therefore at the core of our business practices. The Group has adopted an Enterprise Risk Management (ERM) practice since 2012. The ERM practice mainly focuses on identifying and assessing the uncertainties associated with strategic, operational and business objectives. It also follows the guidance of the Committee of Sponsoring Organizations of the Treadway Commission ("COSO")-ERM framework, which emphasizes effective ERM execution through risk governance, linkages with strategy and operational performance, risk reviews, and regular communication and reporting. So far, the Group has already implemented risk management practices in all existing units/entities in Thailand, maritime business, local plants, truck logistics units, its refinery facility in Malaysia, and a joint venture company in Singapore. In 2020 and 2021, the scope was broadened to include subsidiaries in Vietnam and Indonesia.

The Group plans to deploy the ERM practice to all other offshore subsidiaries and related businesses in which the Group has significant investment (at least 20% of shares with voting rights).

As the core of the Group's ERM, a Risk Management Policy was formulated in accordance with the Group's business goals, strategies and corporate risk appetite. The Policy applies to all entities across the Group, and helps our businesses remain resilient to cope with any challenges encountered by identifying early warning signals of key risks through impact/likelihood assessments and key risk indicators, and by implementing effective risk mitigation plans which are monitored and reviewed on a regular basis. In 2021, the Policy was reviewed by RMC, along with the revision of the ERM Guideline Manual to support policy implementation. Information of the Group's Risk Management Policy can be accessed through Attachment 5.

The Group's ERM structure was conscientiously designed in compliance with good corporate governance principles and the Risk Management Policy. The Risk Management Committee ("RMC") was first established under the auspices of the Board of Directors and the Executive Committee ("EC"), to ensure that the Group's principal and substantial risks can be identified through a thorough assessment of internal and external disruptive factors. It was also designed to encourage all related stakeholders to follow prudent risk management practices, and to help them be fully prepared for all possible scenarios. Established by the RMC in 2015, the Risk Management Office ("RMO") facilitates and exercises adequate oversight of the risk management practices employed by each of the respective business units. The RMO works proactively with the respective business unit ("BU") leaders and Risk Champions/Risk Officers in order to ensure the effective implementation of risk management processes and internal controls, including risk management training and communication across the Group.

As part of the ERM practice, each risk is identified, updated and assessed in risk registers corresponding to each BU. Risk information includes risk descriptions, internal/ external context, risk category according to COSO classification (i.e., operational, strategic, reporting and compliance), internal risk controls, risk assessment (impact/likelihood) and key risk indicators ("KRI"). RMO asks each BU to provide key risks and KRI updates on a quarterly basis. Results are then analyzed and disseminated in the Quarterly Risk Report which is submitted to the RMC, the EC and ultimately to the Board of Directors, for their acknowledgement and consideration.

To maintain our dynamic risk management practice, the Group conducts comprehensive risk reviews every two years to fully reflect potential risks in line with ever-evolving business environments and market conditions. Results are updated and communicated in the Quarterly Risk Report, submitted to the RMC, the EC and ultimately to the Board of Directors. The first round of comprehensive reviews was conducted in 2020, with the next one scheduled for 2022.

In 2021, our key ERM work mainly focused on implementing ERM exercises in the Group's subsidiaries in Vietnam and Indonesia, expected to be completed by early-2022. In addition, the RMO conducted a series of risk management follow-up visits and trainings for all Thai plants and for our refinery in Malaysia online, to ensure that our operations stay resilient with an ERM adequately reflecting the current market situation, particularly in light of the ongoing Covid-19 pandemic.



2.2 Risk factors on business operation

2.2.1 Operational risk associated with the Company or the group of companies, both current risks and emerging risks in the next 3-5 years.

As an important part of the ERM practice, the RMC collectively identified a set of likely key corporate risks that could impact the Group at the corporate level. These top corporate risks were first identified in late-2017 and have been re-assessed every year in RMC meetings, with a corresponding set of effective internal risk controls designed for careful implementation as part of risk mitigation to ensure business resilience. The risks were then presented to the Board of Directors for their acknowledgement and approval.

CURRENT CORPORATE RISKS

One of the key corporate risk concerns is uncertainty associated with crude supply availability. Our asphalt production requires special types of crude with a relatively high sulfur content (sour crude or heavy crude) which can only be sourced from a select few crude sources.

In the past, the Group relied on a single source of heavy crude oil supply from Venezuela, which contributed to crude supply uncertainty. Such exposure could have had adverse impacts on both our refinery operations and our international trading businesses. As a result, since 2020, the Group has formulated and implemented a number of mitigation initiatives to cope with such risks. These include efforts to source commercially viable alternative crude/feedstocks from oil producers and oil trading companies to ensure the non-interrupted operations of our refinery facility.

The Group also procures asphalt directly from regional refineries to support our international trading activities. Meanwhile, volatility in local demand and prices represents another set of key corporate risks pertaining to international retail businesses across some of the Group's key markets (for instance, Vietnam, China, Indonesia). These risks mainly result from local government budget reductions/delays coupled with intense competition from local key players. Measures and control initiatives have been designed and implemented, with a focus on distribution channel enhancement, special project approaches (both public and private), and creating demand for higher-value products while exploring potential M&A opportunities.

Another emerging risk that has adversely impacted the Group's operation has been the Covid-19 pandemic and its many unpredictable consequences. From late-2020 to the whole of 2021, the Covid-19 outbreak interrupted not only our operations but also the life quality of our employees and related stakeholders. A series of risk controls were introduced and implemented to ensure maximum safety and disease prevention. For instance, the implementation of work-from-home protocols, full compliance with the Ministry of Public Health guidelines, the provision of rapid-testing for staff members prior to entering office buildings, as well as regular Covid-19 reports in our monthly Management Meetings. In addition, the Group has implemented the ISO/PAS 45005:2020 Occupational health and safety management guidelines for safe working during the Covid-19 pandemic as additional control measures to ensure the maximum safety of employees at each of our work locations.

EMERGING RISKS

The Group is also cognizant of potential emerging risks that might impact our businesses in the upcoming 3-5 years. One such key corporate risk, is that associated with cyberattacks and IT security. Due to the rapidly changing nature of technological advancements and IT applications across the Group's business practices, there have recently been an increasing number of IT threats and cyberattack incidents such as phishing emails, ransomware and more. Our IT Group has implemented several key risk control measures to mitigate such emerging risks. For instance, it has reviewed our overall IT infrastructure effectiveness, conducted IT security assessments, shifted towards a more secured, cloud-based platform, and implemented a full-scale disaster recovery plan ("DRP").

One of the emerging risks the Group came across concerns personal data privacy and personal data breaches or misuse. In 2021, the IT and RMO departments collaborated to work on data security to ensure personal data protection. A Corporate Policy on Data Protection was formulated, along with the appointment of the Group's Data Protection Officer ("DPO"). This was accompanied by IT operation improvements to ensure maximum data security and the preparation of privacy notices and other key documents, all of which were communicated to related stakeholders to ensure full compliance to the upcoming Personal Data Protection Act ("PDPA"). Information of the Corporate Policy on Data Protection can be accessed through Attachment 5.

RISKS RELATED TO FINANCE

The Group's business activities are exposed to various financial risks, including those related to credit, liquidity, foreign currency, interest rates and oil prices. The Group uses various financial instruments to manage any identified financial risks, but does not use financial instruments for trading or speculative purposes.

The Group's Finance Department operates as a service center, providing treasury advice, funding, and risk management assistance. It also liaises with financial institutions and manages financial risks related to the Group's overall operations in order to ensure that Tipco Asphalt's strategic objectives are met. The use of financial instruments is strictly controlled by policies approved by the Board of Directors. The policies provide specific instructions relating to financial risk management, including commodity hedging, foreign currency, interest rates, and credit and liquidity risks.

CREDIT RISK

The Group's credit policy is regularly reviewed and updated, and our exposure to credit risk is closely monitored on an on-going basis. Credit reviews and evaluations are performed on all customers, while credit approvals are based on delegated limits of authority by credit committees. Sales collections have decreased from 2020 due to the impacts of the pandemic. The Group tries to maintain its collection and bad debt at the same level as the previous year.

LIQUIDITY RISK

The Group operates under unsecured short-term trade and working capital facility arrangements with reputable local and international banks that have a combined limit of over Baht 35 billion or USD 1.05 billion. This amount is more than sufficient to support higher financing requirements for crude purchases in the event of high crude prices. Hence, the liquidity risk of the Group is minimized.

CURRENCY RISK

The Group is exposed to foreign currency risk. This occurs because of the purchase of raw materials, and because of export revenue. The risk is adequately mitigated through the provision of financing and exporting revenue in the same currency. There are also forward contracts booked for known foreign currency debts and expenses which all have a maturity of less than six months.

INTEREST RATE RISK

The Group may consider entering a new interest swap if and when it is exposed to any new long-term loans.

RISKS RELATED TO OIL PRICE FLUCTUATION

The markets for petroleum and petroleum-related products have been moving upwards in line with crude oil prices ranging between USD 51-86 per barrel during the year. The Group's hedging policy has continued to be effective and contributed to support operating results in managing these market risks. In order to continuously address and mitigate price fluctuation risks for both crude oil and finished products, the Company carefully formulates its hedging strategy for each crude cargo.

REFINERY OPERATING ENVIRONMENT RISK

Safety in all aspects of its operations remained the KBC Refinery team's primary focus in 2021. As reported earlier, a detailed review of the refinery's Fire safety Design Philosophy ("FSDP") was initiated in consultation with the Malaysian Fire Safety Authorities ("BOMBA"), following the accident in the crude oil tank farm in July 2018. The recommendations

stemming from this review have been fully implemented as scheduled, and BOMBA have already renewed the refinery's Fire Safety certification in full. The Company continues to carry out training and development programs for its staff, along with regular environmental monitoring and emergency response alertness.

The proactive program of plant integrity identification and assessment processes have enabled KBC to identify the maintenance and upgrade projects that enable and favor the continuous availability and operability of production assets. These actions have significantly contributed to enhancing plant reliability. In fact, KBC achieved a plant reliability level of 99.66% in 2021, a significant achievement for a refinery plant in its 14th year of continuous operations. The refinery team continues to focus on asset integrity to ensure no units fail prematurely.

A considerable degree of complexity was added to the operating environment in 2021 due to the Covid-19 pandemic and the resulting restrictions imposed by the Malaysian Government through various 'Movement Control Orders'. The refinery could not afford to become a 'cluster' for the spread of the virus, and employee health and safety were prioritized. A thorough testing protocol was introduced for anyone entering the refinery, including employees, and was calibrated from time to time with varying levels of strictness depending on the changing situation. The execution of various ongoing projects was also staggered to limit the number of contractor employees inside the refinery on any given day. As a result, the KBC refinery successfully navigated the most severe periods of the pandemic without any impact on its operations.

With regards to personnel safety, KBC continues to adopt a strong safety culture anchored by its 'Goal Zero' initiative. The KBC team takes pride in having a zero-fatality track record since its inception and in its 2,857,094 man-hours without Lost Time Injury ("LTI") as on 31st December 2021. However, every refinery employee recognizes the need to always remain vigilant. KBC regularly monitors its safety initiatives covering all employees and contractors, with a special focus on situational awareness and risk identification campaigns as carried out previously. In addition, daily safety audits are carried out by the Operations Safety teams to ensure that all contractors and their workers inside the refinery always follow the safety regulations. Hot-work and gas test results are shared within the working groups to sustain focus and awareness on the risks associated with each activity.

As per past practice, the refinery continues to prioritize emergency preparedness and response as the key tool to help prevent serious incidents, and to ensure that emergencies can be dealt with as efficiently and effectively as possible. Joint exercises and drills performed in collaboration with the Fire and Rescue Department and other industrial entities in the neighborhood, have helped KBC update and strengthen its Oil Spill Response Plan and Emergency Response Plan.

At the same time, KBC is committed to protecting the environment and minimizing the environmental impacts of its operations, products, and services. The refinery operates in total compliance with local environmental legislations and other related international conventions and protocols and upholds stringent environmental standards. All emissions and effluent discharges are managed in accordance with the Company's Health, Safety, Security, Environment ("HSSE") Commitment and Policy, and KBC strives for the continuous improvement of its operations with regards to the environment. The Company continues to operate using best practices as reflected in its certifications, namely the ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 Occupational Health and Safety Management System, which have all been renewed following a thorough externally conducted audit.

ASPHALT CEMENT SUPPLY RISK

Fluctuations in asphalt cement (“AC”) prices have posed a major risk to the Group. The Group continues to mitigate supply risks by maintaining good, long-term relationships with all refineries in Asia, sustained through regular supply contracts and enquiries. Currently, supply risk is mitigated by the ability to source AC from its own asphalt refinery in Malaysia. Expanding collaborative networks with key partners has also helped identify new sources of AC supply at competitive prices.

RISKS RELATED TO MARITIME BUSINESS

The Group owns and operates eight asphalt tankers that are managed by an in-house professional and innovative management team. We focus on maintaining high-quality tonnage through a clear shipping strategy, and prudent sales and purchases.

The current quality tonnage maintained by the Group suitably supports its increased sales activities in the Asia Pacific and Australia regions, thus reducing the risk exposure associated with capacity constraints.

The Marine Group operates with the mission of zero accidents, zero injuries and zero oil spills. In addition, our assets are insured by first class insurance companies.

The biggest challenge facing the industry in 2021 was and remains the global Covid-19 pandemic. The Marine Group managed to navigate its fleets and seafarers safely in 2021 with zero infections onboard and zero delays in product shipment. There is also still a risk of shortage of well-trained seagoing personnel. The Group continues to make serious efforts in training and developing its seafarers to properly mitigate this challenge.

RISKS RELATED TO DOMESTIC MARKET

Much of the asphalt demand remains closely linked to government policies and annual budget allocations. In addition, the stability of the government continues to have a significant impact on Thailand's asphalt demand, including the 20-year National Economic and Social Development Plan.

In the fiscal year 2021, the government allocated a budget of 151,175 million Baht, an increase from the previous fiscal year, for infrastructure development including construction, surface repair, and maintenance and restoration of road structures. Coupled with delays in government budget allocation from 2020, demand for asphalt has increased.

The ongoing Covid-19 pandemic had some impact on our asphalt business in the Thailand market. It had a more significant impact on construction contractors in some working areas, such as Bangkok and surrounding areas including major cities, resulting in a lack of business continuity and interrupted operations.

RISKS RELATED TO INTERNATIONAL BUSINESS

After agreeing to stop lifting crude from Venezuela in late 2020, the Group faced difficulties in sourcing alternative economical crudes in 2021. Consequently, the KBC production reduced significantly with protracted idle periods. Moreover, while prioritizing retail business, international trading sales were heavily affected.

Throughout 2021, there was occasionally less bitumen availability in the region. However, this was usually compensated by lower demand for bitumen throughout the region, mainly driven by a significant drop in Chinese imports.

It is expected that the 2022 regional market might be unbalanced at some times. While a raising demand is expected, the regularity of production from certain producers including KBC is uncertain, hence inducing a risk in price volatility.

RISKS RELATED TO INTERNATIONAL RETAIL BUSINESS

The safety of all employees and contractors/third parties remains the Group's top priority. As our international retail business is exposed to various industrial risks, all companies have an active safety policy based on regular audits and continuous improvement. Good practices are shared among all entities. Contractors/third parties are audited and expected to comply with the minimum safety requirements.

Our Group Policy, specifically revisited in 2020 to take into account the Covid-19 pandemic, continued to be strictly implemented throughout our retail subsidiaries 2021 which prevented the Group from having major operational disturbances. The main impacts our businesses faced were mostly related to lower government budget spending resulting into lower market demand than expected in some of our retail subsidiaries including Cambodia, Laos, China, and Indonesia. For instance, Asphalt Bangun Sarana ("ABS"), our Indonesia subsidiary was affected by a widespread infection resulting in reduced market demand and some operation interruptions.

RISKS RELATED TO INFORMATION TECHNOLOGY AND CYBERSECURITY

In the era of digital transformation, the Group has leveraged enhanced technology to improve business efficiency and capability, and customer experience, by digitizing many business operations and implementing accompanying processes to strengthen Cyber Risk Management to identify, assess, and respond to cybersecurity risks. Also, the new laws and regulations on data privacy were addressed and applied to the Group's policy to ensure the security and safety of all digital information.

Information Security Risk

The Group has established its IT system and policy to ensure information security and works to properly manage and protect the digital information of the Group.

The Group reviews all activities related to information security to ensure that all information technology users within the domain of the Group and its networks comply with information technology security policy and guidelines. The policy is regularly reviewed by both internal and external audit teams for improvement to make the process more efficient and effective. In anticipation, Information security awareness program is one of strategy that we have developed the plan and rollout to all information technology users to prevent, mitigate risk and help them understand the role they play in helping to combat information security breaches.

Our information security awareness program is one of the strategies we have developed and shared with all of our information technology users to prevent and mitigate risk, and help them understand the role they play in helping to combat information security breaches.

Access Control Risk

The Group's IT systems must be able to handle all internal and external threats. To prevent unauthorized access and compromise to our accounts, the IT department has enhanced protective technologies and identity management systems to mitigate all vulnerabilities and risks, while improving our processes. It is one of the IT department's key priorities to restrict, monitor and protect the confidentiality, integrity and availability of the Group's resources and systems.

All ERP accesses have been revised by our IT department and Business Process Owner ("BPO") to ensure that each role and responsibility is correct in accordance with business functional requirements. Access control is managed by our IT department under the Group's own robust policy and authority.

Operations Security Risk

The Group's operations have expanded to include more information processing facilities that work in line with existing IT work instruction ("WI") processes. Nonetheless, the possibility of operation failure persists, as the Group has grown and become more complex and varied.

To mitigate these risks, the IT department keeps improving the IT service management standard and enhancing the quality of Application Management Service projects ("AMS"). The AMS project will fully support the Tipco Asphalt's new ERP system in its daily operations, and the IT department is focusing on new enhancements, automation processes, and data integration systems as part of our IT road map and strategic plan.

RISKS RELATED TO ENVIRONMENT, SOCIAL AND GOVERNANCE ("ESG")

Since 2020, as part of our comprehensive risk reviews, the RMO has incorporated ESG risk considerations to Tipco Asphalt and its subsidiaries and plants in Thailand. We identified ESG risks together with assessments on the impact and likelihood of ESG-related risks, key risk indicators, and mitigation plans, accordingly. The ESG risk details summary is as follows:

Environmental risks

Our environmental risk review focused on manufacturing operations and transportation. The key risks identified were pollution, greenhouse gas emissions, wastewater management, and product spillage. Through our Integrated Management System Policy, we implemented our environmental management system according to the ISO 14001 Standard, and greenhouse gas emissions management according to the GHG Protocol and GRI Standard.

Several control points have been implemented to reduce the environmental impacts of our business activities such as improved heat transfer efficiency, reduced heat loss in system, the use of alternative fuel such as biodiesel, and improved machine or process efficiency. We also adopted a waste management system following the 3Rs concept (Reduce, Reuse and Recycle) to reduce waste and reuse recycled water. Furthermore, we improved production, loading and other processes to reduce energy consumption, greenhouse gas emissions, potential accidents, and product spillage.

Social risks

Key social risks were identified namely, safety on public road transportation and employee health and safety. For public road safety, we are certified with the ISO39001 standard on Road Traffic Safety (RTS) management across our 5 plants in Thailand and Centralized Logistics office. Prior to all delivery trips, each shipment must adhere to a “Check before drive” and “Travel plan” control, while our outsourced logistic service providers are required to fully comply with our safety procedures. Employee health and safety is also a top priority. Safety risk assessments are conducted across all activities, with mitigation plans and preventative actions. For instance, safety training or UA/UC surveys by Frontline employees are conducted under the current Integrated Management System Policy.

Human rights violations

Human rights violations are another key social risk we prioritize. In 2021, we identified certain risks associated with relevant stakeholders, and potential areas of concern caused by our business operations across the value chain through risk reviews and human rights due diligence. Examples of potential human rights violation risks identified include the fair treatment of employees and the protection of the livelihood of local communities.

We started to assess potential risk exposure and relevant stakeholders across several units while turning our attention to developing risk controls. Measures to ensure the fair treatment of employees include welfare provision to ensure employee safety, good health, and career development through human capital initiatives and internal communication channels. We also collaborated with local communities and business partners to improve their livelihood and safety through CSR activities promoting awareness of public road safety, and public health, while making sure to preserve the environment of the local communities surrounding our plants.

Following a growing global interest in data privacy, the first Thai Personal Data Protection Act (“PDPA”) was issued in May 2019, and is expected to come into effect by mid-2022. We acknowledge the importance of personal data protection and privacy rights, and have therefore implemented several key controls to mitigate such risks. These measures include the improvement of our IT data securities system and access, the development of key documents, and the implementation of a data privacy policy including the assignment of a Data Protection Officer (DPO) of the Group.

Governance risks

Governance is one of our foundational pillars. Our RMO has identified governance risks concerning anti-corruption, information disclosure, and IT security.

Anti-corruption: Since 2017, the Company signed a declaration of intent in Thailand’s Private Sector Collective Action Coalition Against Corruption (“CAC”). The Company continuously monitors business activities with potential exposure to corruption risks, and conducts risk assessments on relevant business units. Effective internal control measures and work procedures are then implemented in accordance with our Anti-Corruption Policy and Anti-Corruption Guideline Manual, with regular risk monitoring and reporting to the Risk Management Committee. The Group was awarded a CAC membership in 2017 and recertified in 2020. In 2021, we revised our policy, guideline manual, Code of Ethics, and corruption risk register, to further improve our anti-corruption practice as per the new Self-Evaluation Tool version 4.0 in preparation for the next round of CAC membership recertification in 2023.

Information on the Group’s Anti-Corruption Policy and Anti-Corruption Guideline Manual can be accessed through Attachment 5.

2.2.2 Investment risk imposed on the securities holders.

RISK RELATED TO MAJOR SHAREHOLDERS WHO HOLD MORE THAN 25%

The Company has 2 major shareholders who collectively control more than 25% of existing shares; namely, Colas. S.A., and Tipco Foods & Supsakorn Family, each of which holds 31% of total paid-up capital (as-end 2021). Such shareholders may disapprove any agenda in the annual general meeting requiring affirmative votes of no less than three-fourths of total vote number of shareholders attending the meeting and entitled to vote.

Nevertheless, pursuant to the Company's Articles of Association, resolutions in normal cases are passed by the majority vote of shareholders attending the meeting and entitled to vote.

3. Sustainability-Driven Organization

3.1 Policy and Sustainability Management Goals

Since 2018, the Group has established a sustainability roadmap that includes a set of group-wide sustainability policies, strategies and goals that are fully aligned with our Vision 2025 corporate strategy. The policies were approved by the Board of Directors, and the roadmap serves as the key driver for us to achieve our sustainable development vision by transforming concepts into practices while embedding In-Process Sustainability Development across our operations.

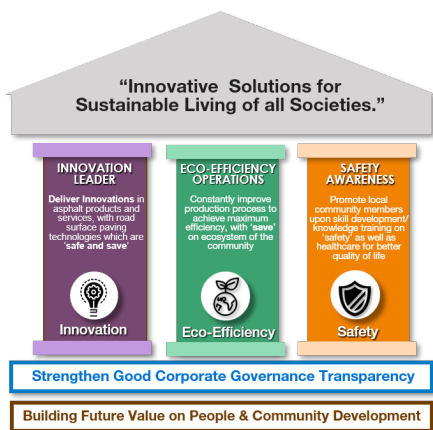
Acknowledging the importance of sustainable development, the Group ensures our sustainable development policies promote the United Nations Sustainable Development Goals (SDGs) while being fully aligned with our business operations across economic, social, and environmental aspects, along with a sound corporate governance philosophy. We aim to become a model corporation with great business integrity that prioritizes safety standards and the health conditions of our employees and related stakeholders, through our commitment to knowledge sharing and the preservation of natural resources and the environment to maintain a peaceful coexistence with society.

The Group has established the following sustainability framework and sustainability management initiatives:

1.) Sustainability Framework (SDG 1-17)

1.1) Sustainable development strategies and foundations:

The Group's sustainable development framework comprises basic business protocol in conjunction with good business conduct, both of which meet international standards. This framework ensures the Group's vision of sustainable development is being realized, and that its capabilities and long-term business operations are strengthened and aligned with the Group's vision of sustainable development. As such, we have formulated the following three sustainable development strategies:



- 1) Innovation Leader
- 2) Eco-efficiency Operations
- 3) Safety Awareness

In addition, to complement the sustainable development strategies, the Group upholds two additional sustainability pillars which are:

- 4) Transparency and Good corporate governance
- 5) Value for the Future – People Development

1.2) Risk management on Environmental, Social and Governance. In 2020, the Group conducted enterprise risk reviews and explicitly identified risks associated with social, environmental and governance aspects including risk assessment and the implementation of control measures. This also included risk-identification to combat corruption and human rights violations. In 2021, the risks were re-visited and reviewed based on their internal control measures to ensure their effectiveness and adequacy.

1.3) Review Materiality Analysis and Assessment to accommodate business plan, decision making and process approach. The review is done through regular surveys conducted on our related stakeholder groups. In 2021,

the Sustainable Development Department conducted the comprehensive Sustainability Materiality survey to stakeholders, both internal and external, the results of which were used for our materiality analysis and sustainable development work directions. The Sustainable Development Department proposed the survey results to the Corporate Governance Committee for their acknowledgement and approval.

- 1.4) Promote corporate sustainable development in accordance with the United Nations' Sustainability Development Goals (SDGs) and the Global Reporting Initiative (GRI)'s sustainability report framework which encompass all operations across economic, social and environment aspects.
- 1.5) Respect relevant stakeholders' interests, by setting goals to ensure their satisfactions while minimizing stakeholder complaints.

2.) Innovation Leader (Innovation SDG 4, SDG 8 and SDG 9)

Since 2018 the Tipco Asphalt Group has integrated an 'innovation philosophy' into its corporate strategy, with a focus on establishing thorough knowledge and a full understanding and structure of the possibilities of innovation through initiatives including its Innovative Solutions Award and Innovation Bootcamp.

The Group formulated Innovation Roadmap 2025 to serve as a guideline for systematic innovative thinking, and will be in effective starting in 2021. The roadmap focuses on employee skill coaching, inspiration, and incentives for employees to initiate and create innovation. In 2022, the plan will aim at innovation initiatives from mutual collaboration across units, giving employees the chance to witness and participate in the benefits of cross-functional, inter-disciplinary cooperation. By 2023, the roadmap will branch out to focus on organizing the Group's innovation across its multiple areas of operation and pairing these with support from external partners to further co-develop new innovations. The ultimate target for 2025 is co-learning with other business partners and innovation-driven companies for the mutual benefit and empowerment of all.



2.1) Promote and communicate innovation with focus on social and environmental responsibility (SDG 4, SDG 9)

The Group supports the integration of both intra- and inter-organizational innovative operations including new ideas, procedures, frameworks, pioneering projects, and cognitive or production and management refinements in order to create value added for the business. Innovation serves as a positive catalyst for changes that can lead to increasing production and maximum benefits for the general public. In this regard, the Group operates in accordance with the following guidelines:

- Observe current operations to ascertain whether there is any operation that poses any risk or negative impact to the general public and the environment, while developing countermeasures to mitigate said risk/ impact. In addition, the Group will conduct in-depth analyses of operations across all aspects to find new opportunities for business innovation development.
- Share our discovery of innovations that benefits society and the environment, as a mean to encourage other businesses and entrepreneurs to follow suit.
- Constantly develop alternative solutions and innovations that lead to new product development opportunities accommodating corporate growth and customer satisfaction.

2.2) Corporate business development via data-driven innovation (SDG 4, SDG 8, SDG 9)

The Group strives to develop business processes via the implementation of data-driven innovation such as service quality and efficiency improvement, decision making and data assessment processes, inter-organizational data sharing, market trend forecasts and estimates, as well as utilizing data innovation to understand stakeholders' needs and uplift quality of life. The aim is to become a data-driven innovator that maximizes the use of large databases to improve business, economic, social, and environment aspects of the Group while allowing data-driven innovation to effectively fulfil all stakeholders' needs. This also promotes and supports the establishment of effective data network platforms with affiliated businesses, partners, and stakeholders across the business value chain, which can optimize information analysis to yield the best solutions and results.

3) Eco-Efficiency Operations (SDG 8, SDG 12, SDG 13)

3.1) Environmental and Climate Change Management (SDG 12 / SDG 13 / SDG 14 / SDG 15)

The Group proactively engages in environmental management to fully comply with the requirements of applicable laws and regulations. It also carefully manages its investment to improve and develop environmental management systems that prioritize innovations and new technologies to tackle issues like effluent and emissions control and greenhouse gas emissions. The Group also aims to protect communities and groups, and to prevent and minimize any sort of environmental impact to nature and society. The Group has a further commitment to environmental biodiversity protection and conservation.

In addition, our Enterprise Risk Management encompasses climate change risk assessments that may affect the organization's business processes such as production, distributions, sales and services. Appropriate measures have been formulated to proactively respond to climate change while ensure our sustainable business growth.

3.2) Circular Economy (SDG 12 / SDG 14)

In view of improving waste management and reducing natural resource and energy consumption, the Group has adopted the circular economy principle. This is achieved by creating knowledge and understanding for employees, searching for technology and innovative solutions that optimize natural resource use, promoting re-usage, reducing waste at the source of origin, and managing and developing a waste separation system for both solid waste and wastewater. Also included are wastewater treatment, remaking, and waste-recycling in manufacturing and other activities. The chief aims are to minimize the use of natural resources in operations and to reduce the amount of waste disposed.

The circular economy concept hinges on the design and development of new products and packaging that require fewer natural resources to produce, and that can be reused, remade, or recycled through reprocessing. Nevertheless, such designs and developments should not cause any future negative environmental impacts

and must create shared value with stakeholders related to the eco-efficiency of a product's life cycle (across suppliers, customers, users and recipients partaking in the disposal or recycling of waste).

4.) Safety Awareness (SDG 3 / SDG 11)

4.1) Instill awareness and safety in the organization's culture (SDG 3, SDG 17)

The Group operates Safety Awareness strategies by raising awareness and fostering a safety culture in the organization. We develop safety-related knowledge and understanding for employees to enable and empower them to act safely, while cultivating safety leadership at all levels and developing safety systems on working procedures and standards. Along with raising the safety management level above the minimum required by law, we supervise and control the operations of stakeholders to ensure their safety simultaneously. This is not only for the safety of employees, but also to oversee the safety of external stakeholders who come to liaise, collaborate or supervise our operations in our workplaces. The goal is to ensure good management of safety risks with proactive control measures.

4.2) Improvement of quality of life in society and community (SDG 3 / SDG 11 / SDG 17)

This shall be implemented across three elements: economic, environmental, and social, with safety as the primary focus. We plan to support and motivate employees of all levels and stakeholders across all sectors to participate in CSR projects which embed safety awareness and sustainable development consciousness across all work operations, with a focus on road safety and Covid-19 control measures to create shared value between the Group and society. This can be achieved by responding to feedback, providing platforms for transparent and creative dialogue, ensuring equal and fair treatment, respecting diversity, and different opinions, as well as promoting development/improvement of the communities' quality of life.

We intend to promote and conduct social and environmental responsibility projects in accordance with CSR, and to stay vigilant on any business conduct that may negatively impact society and/or the environment.

We commit to cooperate with government agencies, industrial associations, business affiliations, civil society parties, and other stakeholders in developing and/or integrating sustainability standards and protocols for the industry and /or other sectors.

5.) Good Corporate Governance and Responsibility to Customer (SDG 3, SDG 16)

5.1) Good Corporate Governance (SDG 16)

The Group upholds justice and transparency in its business conduct and operation, and adheres to all laws, regulations, protocols, and standards set by relevant agencies and international bodies.

The Group also instills and integrates awareness of ethical behavior to employees of all levels to uphold honesty, transparency, justice, morality, risk management, and social and environmental responsibility in its corporate culture. We monitor and ensure the good health and well-being of our employees and create and encourage sound working environments that result in both employees' work satisfaction and effective skill development to achieve corporate goals.

The key goal is to instill awareness in management and in all employees through clear multilateral communication and annual training on corporate ethics.

5.2) Anti-corruption (SDG 16)

In 2019, The Group formulated its Anti-Corruption Policy in response to the ongoing challenge of corruption in Thai society both at the government and private sector levels. Management has launched collaborative efforts to promote anti-corruption practices within the organization. With the approval of the Board of Directors, TIPCO Asphalt Public Company participated and declared its intent in Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) on 4th March 2016. In addition, the Company has developed a supplemental Anti-corruption Guideline Manual, which was communicated to all employees across all subsidiaries and related stakeholders, and has publicly been shared on the company's website as an official guideline.

Details on the Company's Anti-corruption Policy and Anti-Corruption Guideline Manual can be accessed through Attachment 5.

The Company was first certified with CAC membership on 10th November 2017, then recertified again in 2020, which is valid until 30th June 2023. In 2021, the Company revised its Anti-corruption Guideline Manual in preparation for the next round of CAC membership recertification, which will take place in 2023.

5.3) Intellectual Property Practice and Protection of Customer Privacy (SDG 16)

The Group has a clear policy to avoid any potential violation of intellectual property of any form, whether it is copyright, patent, trademark, trade secret, and all other forms of intellectual property indicated by the law. With registered computer software for instance, the Group observes a strict policy of having all computer programs used across its operations tested and installed by its IT department to prevent pirated software.

In addition, the Group issues policies and guidelines on customer personal information protection along with standards and protocols concerning their data collection, processing, store, and protection. This is well in compliance with the upcoming regulation on Personal Data Protection Act ("PDPA") which will be in effect by mid-2022.

In 2021, with help from an external legal consultant, the Group reviewed key aspects related to personal data; i.e., Business requirement, Data flow collection / analysis, PDPA policy drafting, Standard of Operations. The project was completed with the announcement of corporate policy on personal data protection and the appointment of a data protection officer (DPO), followed by Privacy Notices etc. to related stakeholders.

Details on the Group's Corporate policy on personal data protection can be accessed through Attachment 5.

5.4) Responsibility to Customers (SDG 3, SDG 16)

With one of the Group's Vision 2025 strategic goals as 'customer-centric', all our employees have been trained to hone their understanding of customers' demands and expectations. They must direct their knowledge and expertise towards the improvement of products and services so they can fully accommodate and anticipate future needs, thereby enhancing customer experience while securing brand loyalty.

5.5) Respect for Human Rights (SDG 5 / SDG 10)

We ensure the equal treatment of all our employees and respect human rights throughout the value chain, with high consideration of all stakeholders. We treat all employees and workers equally, provide fair job opportunities, assign tasks based on each staff's individual capability with appropriate compensation, and prohibit underaged and illegal employment. This philosophy applies to everyone, including family members of employees and affiliated partners' workers and/or stakeholders. The Group ensures the safety of employees, workers, and company assets without encroaching on the rights and safety of other parties, while protecting personal rights and information, respecting human rights, and treating employees and workers of the company and its affiliations equally.

Our primary goal is to achieve "zero" human rights complaint across all channels.

6.) Value for the future through human resources and community development (SDG 4, SDG 8)

We invest in employee capability development through knowledge training and other necessary resources, alongside creating safe work environments that encourage creativity and allow employees to work at their full capacity and capability. KPIs and criteria are designated for capability development measurement according to business operations to ensure that development goals are met and that employees receive maximum benefits which can be shared with the community.

7.) Policy Compliance (SDG 1-17)

The Board of Directors, management, all employees, and related stakeholders are obligated to follow, promote, and work in accordance with sustainable development policies, with highest consideration of balanced benefits across economic, social, and environment aspects.

8.) Disclosure and Communication (SDG 17)

Disclosure of sustainable development policy, sustainability initiatives and progress outcomes across all aspects must be done in accordance with the requirements set forth by relevant government agencies, and must adequately meet international standards in a transparent and timely manner. This is to reinforce the Group's robust commitment to its sustainable development goals.

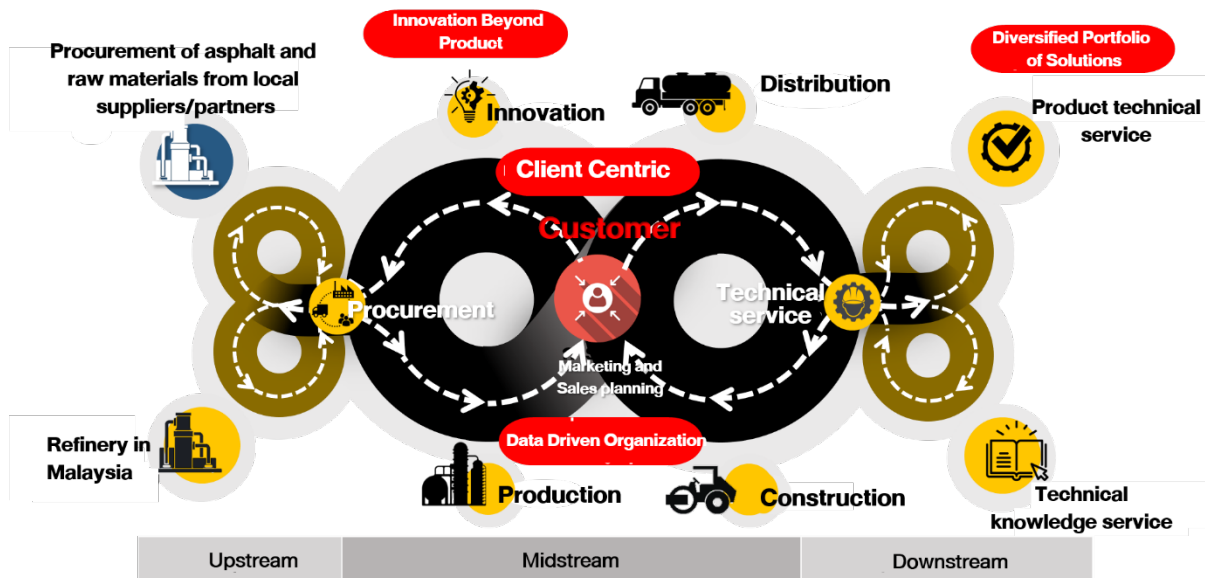
3.2 Stakeholder Impact Management across Value Chain

3.2.1 The Group's Value Chain

The Group's value chain is designed to encompass all business processes in line with its Vision 2025 strategic plan. The value chain begins with customers' preferences and expectations as the core of the business driving force. This 'Customer centric' strategic goal encompasses business operations across the value chain, from upstream to downstream. The market outcome will benefit from using customer demand to analyze and drive innovation and technology across all processes to seek optimal solutions in terms of products and services and work efficiency. For example, implementing digital platform technologies to accommodate customers' needs while streamlining work procedures.

The Group's core strength relies on its ability to adjust work procedures in response to different circumstances to ensure continued, non-interrupted work operations while strengthening business conduct. For instance, a database management system was used in high-risk process such as procurement, including the development of a procurement system for users to ensure a convenient, fast, reliable, and highly flexible process with full controls. In addition, the system allows the procurement of high-quality raw material feeds for production resulting in quality products and services that satisfy

customer expectation. The Group’s logistics management utilizes modern technology to foster customer confidence in our punctual product delivery with real-time monitoring. Our technical services team possesses great expertise on asphalt, and is on standby ready to support customers with technical services and advice throughout all stages; i.e., providing pre-work, during work and post-sale services. Any lessons learnt or effective solutions are recorded as part of a comprehensive database for future use.



Value Chain	Source	Internal Stakeholders	External Stakeholders	Value to Our Stakeholders
Provide	Customers’ needs and expectations on best products and services. The Group can sell products in markets across 5 continents	<ul style="list-style-type: none"> - Sales team, both domestic and international - Customer service team - Finance team - Accounting team 	<ul style="list-style-type: none"> - Customer - Road Contractor - Authority - Competitor 	<ul style="list-style-type: none"> - Good relationship network, and revenues for partners/suppliers
Procure	Crude Oil	<ul style="list-style-type: none"> - Procurement team - Maritime team 	<ul style="list-style-type: none"> - Crude Supplier - Crude Freight Provider 	<ul style="list-style-type: none"> - Secured Supply Source
	Raw materials for local production	<ul style="list-style-type: none"> - Finance team - Management team 	<ul style="list-style-type: none"> - Authority - NGO - Competitor 	<ul style="list-style-type: none"> - Local Procurement - Green Procurement
Refine	Refine Up to 30,000 barrels of crude oil per day through South East Asia’s largest asphalt refinery, resulting in 1.2 million tons of asphalt produced annually	<ul style="list-style-type: none"> - Refinery facilities in Malaysia and other countries - QC team - Sales team - Maritime team - SSHE 	<ul style="list-style-type: none"> - Authority - Communities nearby the refinery - NGO - Competitor 	Alternative Sources - Incomes

Value Chain	Source	Internal Stakeholders	External Stakeholders	Value to Our Stakeholders
Produce	Convert raw materials into premium grade asphalt products, while adhering to the most stringent quality control measures to meet customers', local authorities' and environmental requirements	<ul style="list-style-type: none"> - Operations team (domestic and international) - R&D team - Procurement team - Warehouse team - SSHE 	<ul style="list-style-type: none"> - Raw material supplier - Authority - Consultant - Investor, Shareholder - Communities nearby plants and offices 	Best quality products for road user safety. Reliability and trust with stakeholders
Distribute	<p>Collect, prepare, and distribute products to customer via the following distribution channels:</p> <p>Trucks Largest asphalt truck fleet in Thailand with knowledge and expertise on safe handling and care of asphalt product</p> <p>Vessels Specialized ocean-going asphalt vessel fleet that is qualified to conduct asphalt loading and discharging operations across all ports/ terminals</p>	<ul style="list-style-type: none"> - Centralized logistic - Maritime team - Sales team both domestic and international - Warehouse team 	<ul style="list-style-type: none"> - Logistic supplier - Authority - Customer - Communities nearby plants and along delivery routes - Competitor 	Various merchandise delivery channels, prompt, timely and reliable services
Service	Domestic and internal markets along with providing technical service teams, equipped with product and application know-how to our customers for on-site assistances	<ul style="list-style-type: none"> - Technician team, both domestic and international - Sales team, both domestic and international - Operation team, both domestic and international 	<ul style="list-style-type: none"> - Road contractor - Consultant - Authority - Competitor 	Great customer satisfactions of customers from our both pre- and post - sales service.
Apply	Road surface paving techniques and expertise, entrusted and certified by government agencies, to build road networks vital to infrastructure development and growth	<ul style="list-style-type: none"> - Construction team - R&D Team - Technical team - Consultant team 	<ul style="list-style-type: none"> - Road contractor - Customer - Road user/ community - Academic institute - NGO, Mass media 	More safety for road users

3.2.2 Stakeholder Engagement and Sustainable Co-Value Creation

Stakeholder Engagement and Sustainable Co-Value Creation		
Stakeholders	Stakeholder Expectations	Responses
Internal Stakeholders		
Company Directors	<ol style="list-style-type: none"> 1. Conduct business in accordance with regulations and ethics 2. Conduct business with transparency. 3. Conduct business in order to achieve sustainable success 	<ol style="list-style-type: none"> 1. Good corporate governance according to the policy and strictly enforced 2. Embedded sustainability in corporate & business plan
Employees and Families	<ol style="list-style-type: none"> 1. Good quality of life and well-being 2. Work in a healthy and safe environment 3. Access to job stability and career advancement 4. Fair compensation and respect human rights 5. Access to training sessions for skill development 	<ol style="list-style-type: none"> 1. Happy and Safe Workplace with work-life balance 2. Skills & Potentials Development Continuously 3. Promotion, Salary, and Career Advancement 4. Open communication corporate Activities 5. Foster Innovation Culture that promotes productivity and creativity
External Stakeholders		
Customers	<ol style="list-style-type: none"> 1. High quality products and services at competitive prices 2. Ensure privacy and security of personal data, fair treatment, and respect customer rights 3. Timely delivery of products and services 	<ol style="list-style-type: none"> 1. Reliable delivering high-quality products in timely manner and in-full quantity 2. Accommodate the customers' needs across all product aspects 3. Provide effective communication channels for feedbacks and complaints 4. Customer relations activities, seminars and roadshows 5. Good corporate governance and transparency that can be audited 6. Implement Anti-Corruption Policy and implement action plans 7. Managing product and service following Quality Management System (ISO9001) 8. byproduct certification via testing and calibration laboratories standard (ISO17025) 9. Adhere to ethical conduct upon clients' personal data protection
Government Agencies and Public Organizations	<ol style="list-style-type: none"> 1. Able to conduct all business operations in accordance with relevant regulations and requirements 2. Develop organizational capability in production process improvement to be eco-friendly with minimum environmental impact 3. Support, and coordinate with the government sector upon projects that benefit the general public, society or local communities 4. Organize anti-corruption and human rights violation campaigns 	<ol style="list-style-type: none"> 1. Fully comply with relevant regulations and requirements 2. Support collaborative projects to achieve the United Nations' Sustainable Development Goals (UNSDG) 3. Share technology and innovation 4. Pay local maintenance tax for community development, and focus on local employment 5. Be transparent in information disclosure 6. Prepare and disclose 56-1 One Report

Stakeholder Engagement and Sustainable Co-Value Creation		
Stakeholders	Stakeholder Expectations	Responses
External Stakeholders		
Supplier/Partner	<ol style="list-style-type: none"> 1. Receive accurate data timely manner 2. Ensure fair business practice, delivery of payments, respect human rights 	<ol style="list-style-type: none"> 1. Create confidence over safe workplace environment for business partners 2. Cultivate good relationships by sharing information and good business practices 3. Participate in collaborative efforts for business expansion and growth, as well as leading anti-corruption campaign 4. Share knowledge to ensure business operations with maximum efficiency
Community/Society/ Academic Institutions	<ol style="list-style-type: none"> 1. Ensure a pollution-free environment 2. Supports knowledge and education 	<ol style="list-style-type: none"> 1. Cooperate and support knowledge and expertise sharing 2. Improve quality of life and safety by utilizing organizational expertise 3. Listen to community needs and complaints with open mind
Road user	Ensure road safety	<ol style="list-style-type: none"> 1. Ensure road safety at all time 2. Conduct high quality road paving with long, useful road lifetime
Shareholder/Investor/ analyst	Ensure financial and cash flow stability, potential growth of capital, returns, and business sustainability	<ol style="list-style-type: none"> 1. High financial returns 2. Carefully-managed business growth 3. Conduct business with transparency and ethics to ensure good corporate image, accepted by the general public
Mass Media	Disclose accurate, clear, and timely information to the general public	<ol style="list-style-type: none"> 1. Disclose accurate and timely information 2. Encourage creative media use
Competitor	Conduct fair business practice, oppose monopoly, and promote business transparency	Adhere business ethics fair and transparent management

3.3 Sustainability Management on Environmental Dimension

3.3.1 Environmental Policy and Guideline

Tipco Asphalt has established and implemented the Environmental Management System according to ISO 14001 standard and have been certified at the Head Office and all 5 domestic plants in Thailand by an independent certification body since 2003. The Group continues to develop environmental management and still holds its certification today. Pursuant to our Integrated Management System Policy, the Group aims to protect the environment by preventing/controlling the pollutants from our business activities that may impact the environment, in accordance with our sustainable development strategy of eco-efficiency operations focusing on environmental management, climate change mitigation and promoting the circular economy principle. Details on the environmental policy can be accessed through Attachment 5.

The Group has developed short-term action plans, which are as follows:

- Reduce GHG emissions intensity through innovations and focus improvement of TPM to improve the efficiency of operations pertaining to production and products distribution processes.
- Reduce industrial waste disposal by minimizing wastes generated at the origin.
- Plan to initiate the collection of greenhouse gas emissions data in Scope 3 related to its business to analyze the preliminary data for working with stakeholders to reduce greenhouse gas emissions together.
- Promote multiple-use of materials and avoid the single-use materials, Seek and create added value from waste through a recycling process.
- Reduce groundwater resource usage by providing the surface-water internal reservoirs at plants and increasing recycled water usage.

Additionally, its long-term action plans are as follows:

- Minimize GHG emissions intensity (as measured by ton carbon dioxide equivalent per ton produced) through innovations and technology by reducing emissions and through the removal or sequestration of greenhouse gases from the atmosphere.
- Switch energy sources from fossil fuel to proper alternative energy sources such as bio-fuel energy, wind or solar energy, etc.

In early 2021, we reviewed and announced our new Environmental Policy that aligns with the company's sustainable strategy on eco-efficiency operations. Key strategies include supporting research and development that create environmentally friendly innovations, reducing greenhouse gas emission both directly and indirectly, promoting the use of alternative energy sources, promoting a circular economy, and disclosing environmental operations result to the public through sustainability reports, etc.

3.3.2 Environmental operations according to the eco-efficiency operations strategy

1) Environmental Management and climate change mitigation

Greenhouse Gas Emission, The Group has implemented the Greenhouse Gas ("GHG") Management according to the GHG Protocol - A Corporate Accounting and Reporting Standard. The organizational boundary includes the 5 Thai plants, and the operation boundary encompasses direct GHG emissions (Scope 1) from fuel combustion in business processes (including production, storage and distribution) and indirect GHG emissions from electricity use

(Scope 2) in both offices and operation plants. Consequently, Tipco Asphalt has planned and implemented the following GHG emissions reduction in 2021. The Company improved the Centralize Logistic Center at Phrapradaeng terminal to manage products distribution for 5 plants in order to minimize fuel consumption and improve truck utilization.

In 2021, GHG emissions of all 5 plants of Tipco Asphalt were as follows: Net direct GHG emissions (Scope 1) were 13,352 ton of carbon dioxide equivalent; net indirect GHG emissions (Scope 2) were 1,798 ton of carbon dioxide equivalent; total net direct and indirect GHG emissions (Scope 1 & 2) were 15,150 ton of carbon dioxide equivalent. Direct and indirect (Scope 1 & 2) GHG emissions intensity were 0.029 ton of carbon dioxide equivalent per ton produced, which decreased by 9.81%, compared to the base year 2021. By 2025, the Group aims to reduce GHG emissions intensity per ton by at least 6%, compared to the base year 2020 and plans to cover other indirect GHG emissions (Scope 3) as well.

Furthermore, the Group underwent verification and certification of GHG emissions in 2021 by an independent third party (Management System Certification Institute Thailand – MASCI) which is widely accepted according to international standards., covering verified data from January to December 2021.

Energy Saving: In 2021, we focused on efficient energy management through a continuous search for innovative ideas related to fuel and energy savings, and on reducing GHG emissions simultaneously. We are focusing on the transition from diesel (a fossil fuel energy source), to renewable energy, such as switching to biodiesel (B20) for hot oil boilers in the asphalt production process and switching to biodiesel (B10) for the Group’s asphalt distribution trucks. In addition, we improved the energy efficiency of our production operations by installing new hot oil boilers, and adjusting their activation time to suit production needs. Total energy/fuel consumption in 2021 was 190,249 gigajoule and the consumption of energy intensity per unit of product was 0.36 gigajoule per ton produced, a decline of 9.06%, from 2020’s figures, which met our target to cut energy consumption by 2% compared to the previous year.

2) Promote the Circular Economy

Water Use and Wastewater Discharge: Our 5 plants in Thailand are located in areas with abundant water sources, and our production process requires a relatively low amount of water. It is therefore very unlikely that our operations will encounter water shortages or water stress concerns. Nevertheless, the Tipco Asphalt Group aims to constantly improve our water use efficiency under the “3Rs” concept, i.e., Reduce, Reuse and Recycle. 4 of our 5 plants use rainwater collected in the surface water reservoir located inside each factory to reduce water consumption from natural external sources. In addition, we improved the water supply system inside the Rayong factory in 2020 to reduce water use from external municipal supply. Water quality checks are conducted to ensure full compliance with tap water standards for safe usage. Production wastewater is also treated and recycled during the asphalt emulsion production process. Since 2021, we have been able to treat wastewater from production, and recycle it for asphalt emulsion production amounting to around 2,590 cubic meters, or a 5% decrease in water consumption compared to 2020.

Waste and Pollution Management: The Group realizes the importance of waste and pollution management. We commit to manage our waste under the 3Rs principle, i.e., Reduce, Reuse and Recycle. We are also making changes to reduce the amount of waste at the source of origin, and to improve the sorting system for each type of waste through our campaigns to reduce and sort waste for employees in our factories. The aim is to increase the effectiveness of waste management by focusing on the sorting of waste for reuse or recycle in the factories according to of the Department of Industrial Works guidelines. In 2021, all 5 plants in the Group generated a total of 247.28 tons of industrial waste and zero waste to landfill.

Pollution Control: The Group conducts environmental quality measurements at least once a year at each workplace. In 2021, we found that the results for air quality, wastewater discharge, odor and noise measurements followed statutory requirements, while there had been no significant product spillage during the product distribution processes outside the factories in the 2018 – 2021 period.

3.4 Sustainability Management on Social dimension

3.4.1 Corporate Social Responsibility policy

The TIPCO Asphalt Group is committed to upholding its high standards for business conduct in accordance with good corporate governance principles, respect for human rights, and equitable treatment for all as stipulated by the Group's corporate ethics. These also encompass awareness regarding the Group's responsibility towards society, community, and the environment, all in the aim of mutually beneficially co-existence and collaboration, particularly with regards to sustainable development.

The Group has formulated a social responsibility policy which focuses on the impacts of our products and services and/or work operations on the economy, society and environment. The Policy also emphasizes targeted community development achieved through the Group's expertise coupled with sustainability-oriented endeavors. More importantly, the Group integrates social responsibility into all business decision-making across the Group's value chain.

Details on Corporate Social Responsibility can be assessed through Attachment 5.

3.4.2 Social performance

3.4.2.1 Human rights

Under the United Nations Guiding Principles on Business and Human Rights (UNGPs), the Tipco Asphalt Group announced its own human rights policy in 2014, updated on 12th May 2021 with a focus on good corporate governance principles whereby staff at all levels must fully comply with labor laws and human rights regulations.

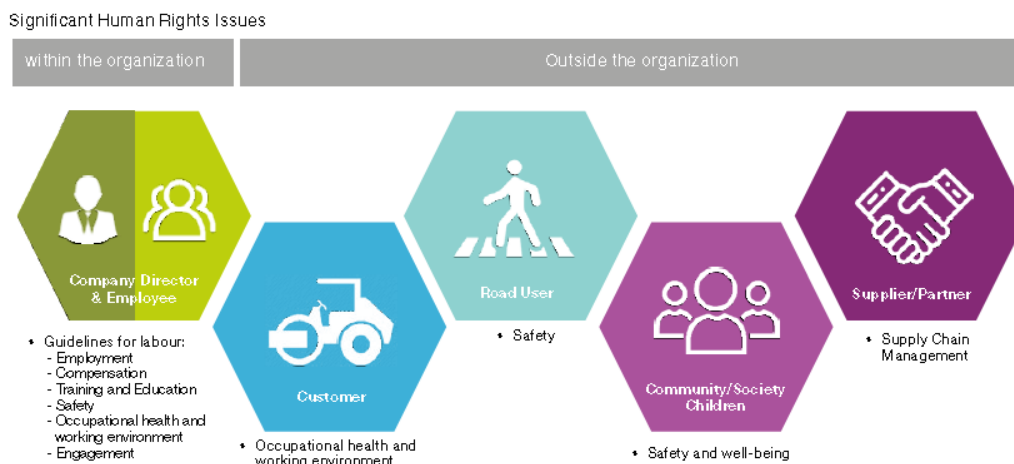
This policy decrees that labor rights, women's rights and children's rights must be respected, with fair and equitable treatment for all those concerned in accordance with prevailing Thai and international standards. Details on the matter can be accessed through Attachment 5. In 2021, the policy was revised to include all business alliances, such as business partners and customers, to operate in line with our policy.

Although Thailand has not implemented specific regulations under the UNGPs, it has comparable legislation measures to the Labor Protection Act such as the Thai Labor Standard (TLS), which is a local practice conducted under the auspices of the International Labor Organization. The Group has adopted the TLS, which is voluntary for private organizations in Thailand, reflecting the Group's commitment to improving the life quality of its employees, and strengthening the sustainable growth of the business.

Out of principle, the Group respects and is fully aware of human rights across all its stakeholder groups, while understanding major human rights issues on a larger world scale. All these concerns are fully reflected across the Group's key activities. From a risk management perspective, human rights issues of the Group are on a medium to low level. Since the risk assessment in 2019, the risk review in 2020, and the record in 2021, there have been zero cases of human rights related issues from any corporate whistleblowing channels.

From the sustainability materiality survey in 2021, we have found that our employees, in regards to human rights and labor rights, incur low risks of negative impacts. Top three impacts to human rights are found in safety and occupation health of customer on product usage, and contractors of customers on product handling, as well as safety and livelihood of road users and communities.

As a leading corporate organization dealing in manufacturing and distributing raw materials for road construction and infrastructures to accommodate national infrastructure developments, the Group ensures its constant delivery of added value to society. As a result, the Group observes and honors the following key human rights issues, among both internal and external stakeholders:



An upcoming issue is the impending Personal Data Protection Act (PDPA) 2019, that was supposed to take effect on 1st June 2021 and later postponed to 1st June 2022. Until then, the Group recognizes the significance of this law, and a Corporate Policy on personal data protection has been formulated and approved by the Board of Director in August 2021, with the resulting approval of a Data Protection Officer's appointment. In response to personal data protection under human rights policies, our action for the PDPA is set to be ready by the first quarter of 2022.

LABOUR RIGHTS

To manage employee expectations, the Group uses various communication channels and organizes meetings with employees at each location. Together with the findings from the Materiality Assessment according to table 3.2.2 the section of Employees and Families -- fair and humane compensation being distributed equally, we provide information regarding gender equality in remuneration.

Employee salary and compensation, categorized by gender, begins with the same starting rate for new graduate hires for both men and women. That said, our 2021 report showed that the average basic salary of our female employees is slightly higher than their male counterparts. This resulted from less number of female than male employees in the Group and more women hold higher-ranking positions. Other variables also include individual performance grades and work experience.

Average ratio of basic salary and remuneration	2019	2020	2021
Female to male	1.19 : 1.00	1.18 : 1.00	1.12 : 1.00

In communicating with employees, the Human Capital Management Department conducts meetings with employees in local offices to provide information on compensation structure with comparison of market data from relevant industries. This also includes a session on career advancement opportunities based on our Job Competency Profile guidelines, and assessments of individual performance appraisals.

HUMAN RIGHTS OF CUSTOMER

Our customers are regarded and treated as key stakeholders of the TIPCO Asphalt Group. We are fully aware that customer human rights are as important as all other stakeholders' human rights. Any customer-related issues that may arise during business transactions are the Group's responsibility. The Group has expressed its responsibilities to customer rights as follows:

- Customer information and privacy: The Group does not disclose any of its customers' information, nor does it share any data of joint business associated with customers' affiliates to external entities be they in the same industry or in other non-related sectors.
- Customer data security: The Group safeguards all customer information kept at the Group, whatever form that information takes, be it physical documents or electronic media, to ensure no information is leaked by intentional or non-intentional means.
- The Group fully informs customers of how customer data is used. This is to ensure that customers get a full and transparent understanding of our business operations, while enjoying adequate and sufficient data protection. A customer complaint channel is available in case any customers are treated unfairly.

In order to ensure that customer human rights are respected and treated fairly in accordance with international human rights guidelines, the Group implements an enterprise risk management (ERM) to identify and assess potential customer risks including those related to human rights.

According to our 2021 results, the Group found no issues in social laws or regulations breaches related to human rights violations

HUMAN RIGHTS OF SUPPLIER

The development of solution mechanisms to prevent human rights violation issues and conflicts is one of the top priorities for the Tipco Asphalt Group. The Group is fully committed to taking responsibility in the face of any emerging conflict issues, and to staying proactive in the promotion of our business partners' human rights, when it comes to the delivery of our products and services.

Any new businesses expressing their interest in working with the Group will be required to conduct a self-assessment covering the topics of forced labor employment, work compensation, work hours, fair treatment, discipline and punishment, child and female labor use, employee negotiating power, occupational health and safety, work environment and welfare. The results of these self-assessments serve as the main partner selection criteria, together with onsite visits of prospective partners' premises (factories and/or sales offices) by selected representatives from the Group.

Partners that pass all selection criteria will be chosen to conduct business with us. Prior to conducting the first business transaction, said qualified partner must submit a letter of intent signed by its authorized directors that fully complies with labor laws and the Group's policy. Once the partner has been in business with the Group for more than a year, said partner must participate in the Group's supplier capability assessment conducted by the Procurement Department. This protocol ensures our partners maintain the business capability and qualification standards set forth by the Group.

HUMAN RIGHTS OF ROAD USER AND COMMUNITY

The community is regarded as one of the key stakeholders that the Tipco Asphalt Group focuses on across our business value chain. As a member of the community, the Group acknowledges the “human rights of the community”, recognizing that each community member has the right to access natural resources, while it is our responsibility to ensure that national resource use, the environment, and bio-diversity are monitored responsibly and equitably. This needs to be accomplished along with other concerns such as higher income, good health care, and sound public safety.

The Group provides support for various projects and initiatives from local organizations, community leaders, or other business units. We also extend those projects initiated by the Group to the communities – for instance, public safety, health, education, and culture. Nevertheless, the Group’s primary focus has been on useful initiatives where we can utilize our internal knowledge and expertise for the benefit of the community.

Having access to public road networks and public road safety is crucial to all communities. These can help reduce accidents caused by poor, worn-out roads, which are among the major causes of personal injuries and road accidents. Our “patching potholes with TIPCO Premix” project is an example of such initiatives.

CHILDREN RIGHTS

Children are important members of the community. According to the definition of the Convention on the Rights of the Child and other conventions, ‘children’ refers to any individual lower than 18-years of age. These infants, young children, and teenagers are highly vulnerable but play a crucial role in the success of business operations and of long-term sustainability.

The Group therefore respects children’s rights across 4 major areas in accordance with UNICEF’s Children’s Rights and Business Principles (CRBP), i.e., Survival, Participation, Protection, and Development. The Group assesses children’s well-being in 3 key areas across our value chain. These include key processes and activities pertaining to the business (workplace), sales and distribution channels (marketplace), and communities near our plant facilities (community and environment). This is to promote the innovation of infrastructure development while improving standard of livings, and ultimately achieving sustainable development.

The Group also promotes projects that community members can co-participate and engage in together. These initiatives allow children and adult members of the community to realize the potential of harmonious co-habitation and the importance of the co-preservation of natural resources. Some of these ideas were proposed by our own staff from local plants. For instance, the National Children’s Day activity that all children and their parents participated in on basic road safety knowledge training, or the “Safe journey to school” was proposed by local staff members. This project received tremendous participation from students, teachers and community members, as did other similar pothole patching projects on worn-out roads.

As a leading company in road construction and maintenance throughout Thailand, the Group firmly believes that sustainable business cannot be achieved through constant development alone, but also through strong foundations from sustainable community-engagement.

3.4.2.2 HUMAN CAPITAL MANAGEMENT AND DEVELOPMENT

As our business model shifts towards becoming more customer-centric, human capital management has geared all employees to accommodating such an approach. This is based on the notion that there is a relationship between employee attitude and customer satisfaction, which is related to sales and profitability. Therefore, employees can strongly contribute to an organization’s financial success by adapting to the customer-centric model in their work and work-related activities.

The Tipco Asphalt Group has established a human capital management system, with a focus on talent development. The objective is to train talented staff to become future leaders with a highly mobile, international mindset to work across different cultures and locations.

We focus on an employee-centric model to ensure employees enjoy working with the company and are proud of what they do. In addition, we expect they will be proud and inform others about the Group and its empowering employee-centric culture. Our goal is to ensure employees enjoy a greater work-life balance while creating a work environment that encourages the development of creativity and new ideas. In addition, our employee-centric culture will appeal to talented job-seekers and can yield higher employee retention.

The Tipco Group prioritizes retaining talented employees. To accommodate our business expansion across different countries, it is vital to promote international mindsets to ensure our staff can comfortably work in cross-cultural environments while still achieving business success. Talented employees include management trainees and high potential employees. They are engaged in individual development programs (IDP) and specially designed assignment topics in addition to their current positions' work requirements.

We implement a simple 70/20/10 concept to develop talented employees; i.e., 70% self-learning through job assignments, 20% through coaching and 10% through classroom training. We project that the talented employees will benefit most from the 70% self-learning.

The goals and performance are established as follows:

Goals	Performance		
	2019	2020	2021
Employee turnover rate no more than 10%	9.7%	5.4%	8.6%
Employee return to work, after parental leave, at 100%	92.0%	100%	100%
High potential staff promotion to management level	27.0%	25.0%	22.2%
Minimum yearly training hours per employee - Target at least 24 hours (for functional and managerial training only)	30.6	24.7	18.0
Succession planning target at 100 %	91.3%	95.2%	90.0%
Retention rate of high potential staff - target at 100 %	73.0%	100%	94.4%
Employee Effectiveness survey result (minimum 75%)			
Employee Engagement	-	-	56.0%
Employee Enablement	-	-	58.0%

3.4.2.3 Occupational Health Operation, Safety, and Work Environment

The Tipco Asphalt Group has implemented occupational health operation and safety in accordance with ISO45001 since 2008, previously known as OHSAS18001, with certifications at the head Office and all 5 Thai plants from an independent certification body. At present, the Group is implementing the ISO45005 general guidelines for safe work environments during the Covid-19 pandemic as standard practice for risk identification, assessments, and internal control measures including emergency plan responses to the pandemic.

The Group constantly ensures a safe work environment, with robust measures in place to prevent accidents, personal injury and illness associated with work operations of employees and related stakeholders. We promote risk-based thinking for all employees to reduce and mitigate any potential risks that might impact occupational health and safety, in accordance with our sustainable development strategy focusing on the public safety of all stakeholders.

The Group has developed the following short-term action plans that were implemented in 2020-2021:

Employee Safety

- Covid-19 prevention and control measure were implemented based on the Risk assessment of Onsite activity, Staff transportation and WFH.
- Online Training for Basic and Annual safety practice was conducted for all employees during the Pandemic.
- Route survey and Road safety assessments were conducted to prepare a guideline Risk and Rest path as well as a Required parking point with a Readiness check e.g. Road conditions, Recommended speed and Gear and Truck quick checks.
- Annual Defensive Driving Courses for drivers with detailed evaluation tools were used to identify skills and techniques needing improving.
- Accidents and Prevention plans were shared in Plant SHE committee monthly meetings and communicated across all levels.
- Regular KYT meetings were arranged via the company's Line Group.
- Machine basic information, PPE, Lockout Tagout points were shared via QR codes at the using sites.
- Employee Happy workplace promoting activities e.g., Daytime exercise, online live concerts, Life coach online seminars, etc. were organized during the year.

Contractor and Subcontractor Safety

- Onsite Driving exercise were developed for Outsource drivers in order to promote safe drive practices.
- Work permit procedures with JSA were implemented for all contractor activity.
- Regular KYT with Contractors and Safety officers were implemented.

Customer Safety

- Safety practice and Use of PPE were shared with Customers via online training.
- Customers' designated drivers were invited to train at a Defensive Driving Course for promoting Safe drive practices.

Community Safety

- Truck blind spots and road safety leaflets were dispatched to road users along product delivery paths.
- Covid-19 prevention kits and knowledge were communicated across the communities neighboring our Plants.
- Covid-19 PPE and prevention kits were donated to medical officers for Covid-19 testing in the community.

Throughout 2021, the Group continuously developed and improved the effectiveness of its safety operation management systems to reduce risk and prevent illness, personal injury, or loss of life, while promoting quality of life to ensure employees' good health. The operating results are as follows:

- 1 Fatal accident case from Logistics outsource
- No accident causing major injuries or loss of life.
- Lost Time Injury Frequency Rate stood at 0 times per one million working hours for all employee including Truck driver.
- Lost Time Injury Severity Rate was recorded at 0 day per one million working hours for all employee including Truck driver.

3.4.2.4 Corporate Social and Community Responsibility Operation

As the ongoing Covid-19 pandemic has become more intense, the Group has had to adjust its plan on social activity initiatives to fully comply with the Group's and the government's occupational health and safety regulations. This year, most of the funding was expedited on social communities which were adversely impacted by the Covid-19 pandemic.

Nevertheless, as long-term social and community projects and activities were carried out, necessary changes were introduced where appropriate to suit the evolving social and public health situation. In particular, the Group collaborated more with public health agencies and private hospitals. For instance, knowledge sharing activities were carried out on road repairs with Premix products in conjunction with the Army Medical Department; basic life-saving knowledge training (CPR & AED) was provided for staff and relevant communities; blood and medical supplies donations to charities. Details on the key projects are as follows:

Economic: based on the strategy, "Innovation drives the future"

- The TIPCO Open House for asphalt industry education and participation in road building is one of the country's essential infrastructures. The TIPCO Open House project has since hosted a total of 328 participating students and 11 academic institutions.
- Premix Use Demonstration Training for external stakeholders - the project was already repeated 2 times.
- The Internal Innovation Project produced a total of 133 innovations which resulted in 47 million baht in cost savings for 34 projects, and 367,000 minutes worktime reduction for 29 projects (amounting to an estimated value of about 528,370 baht)
- In 2020, the Internal innovation project produced a total of 79 innovations which resulted in 20 million baht in cost savings for 15 projects, and 198,700 minutes worktime reduction for 13 projects
- In 2021, we repeatedly conducted our Innovation Bootcamp with a total of 105 participants, 69 of whom were from Thailand, and 36 from our international subsidiaries. There were 19 innovative project ideas from all participants. We also developed the 8-month Innovation Accelerator Program designed to provide key support needed to scaleup and quickly launch innovation projects to the market. There were 5 qualified projects in this program, 1 of which is a service innovation and the remainder of which are product innovations.
- The TPM process can promote innovation initiatives by employees at all levels which can generate 16.8 million baht in cost savings and reduce worktime (estimated time reduction worth 5,183 baht) as reflected by our 2021 figures.

Environmental: based on the strategy, "Social and Environmental Impact Reduction"

- The "All Our Tree Our Forest" project of the Tipco Group has for aim to grow fertile forests in the future, and to contribute to reducing global warming through the absorption of carbon dioxide and environmental preservation. A total of 33,600 trees in the forest were conserved near the community, covering approximately 127 square meters.

- The Beung Takreng project has been developed with the aim of becoming an eco-tourism attraction. The project is done in conjunction with the Beung Takreng Muang Mai Municipality on site owned by the Royal Irrigation Department. The project highlights mahogany and large tree plantings (measuring 4 meters or more). Over the past five years, the site has served as the new home of over 3,360, new large trees.



- The Road and Forest Cohabitant Project involves the relocation of large trees from locations obstructing road paving sites to public areas where they can better be preserved. In 2021, a total of 240 trees were relocated. A total of 324 trees were relocated since 2019.
- The Bang Krasob Forestation project is located at Baan Bang Krasob village, SongKhanong Subdistrict Samut Prakarn. The project focuses on the 12,432 trees left in the deserted areas of the Ratchaphatsadu State Property and Land and Forest Community Nong Pakjai Subdistrict, Nakhon Ratchasima. The project has already planted a total of 4,977 trees, following the natural forestation guidelines set by the Royal Initiative Project 3 Forests. This initiative aims to achieve balance in the natural world and sustainability, while promoting tree planting activities, soil conservation, and expanding greener "Clear Lung" areas for the community.



- The defensive Driving Course is in place to ensure road safety in accordance with regulations while enhancing the necessary skills for the safety of drivers and road users. Thus far, a total of 101 drivers have completed the training course since 2000 (representing 100% of overall drivers) and around 139 outsourced truck drivers participated in the Safety Training Course of Outsource truck drivers (representing 100% of drivers from 6 outsource companies).

Social: based on the strategy, “Community Safety is Priority”

- Pothole repair using ready-made asphalts to ensure road safety, which was carried out across 2 projects, covering 107 square meters of pothole areas.
- 1 CPR and AED training sessions, with 65 participants, and a total of 2,084 participants since 2018.
- Road safety for 52 children and adolescents from 1 school.
- Multi-sensory playgrounds at the Regional Special Education Center 7 Phitsanulok for children with special needs to stimulate and develop their skills.
- Corporate social responsibility initiatives: Establishment of the Surat Thani CSR center with the objective of improving the community’s quality of life under the philosophy of sustainability and a self-sufficient economy. For instance, the Ta Rong Chang Subdistrict fertilizer mixing plant, with 120 participating residents from 5 local villages. The project was very successful and could reduce fertilizer costs by 3.2 million baht per year.



Public Charity and Arts and Culture Support

- Buddhism support, including
 - A Buddhism support project at the Priestly Place Banraitorsi Pak Chong Nakhon Ratchasima to cultivate mindfulness and share knowledge about Buddhism.
 - Annual Kathin at Opas Temple, Rayong, in which the Group has donated to religious charities together with employees and the general public for a total donation sum of 93,429 baht.
- Supporting projects from Chulalongkorn Hospital, Siriraj Hospital, Ramathibodi Hospital, and Government support for COVID-19 Relief, amounting to 9,787,803 baht.



Community-based Volunteer

In 2021, community volunteer activities were affected by the Covid-19 pandemic, including some of our biggest operations such as the ready-made Premix road repairs and CPR training, which could not be carried out as normal due to concerns over overcrowding and social distancing. Therefore, The Group adjusted its plans in accordance with corporate and government policies by focusing on employee volunteer development, such as “Tipco Go Lean” which focuses on better quality of life and health, as well as a collaborative donations with the government and the private sector to ensure the continuation of their development despite the pandemic. Consequently, the target volunteer hours in 2019 was reduced from 22.9 hrs/person/year to 16 hrs/person/year reflecting the situation, with the occasional participation of agencies, resulting in a lower total community-based volunteer participation rate. Nevertheless, the Group is confident that employees are still motivated to participate in community-based volunteer activities and will continue to do so when the pandemic situation becomes under control, and when ordinary life can be resumed.

Volunteer Activity	2018	2019	2020	2021
Employees' volunteer hours	23,978	15,358	13,077	2,716
Participation rate (hours/person/year)	34.8	22.9	24.5	7.8
Total participants (person)	689	670	528	348
Employee volunteer proportion	95.0%	93.5%	81.4%	93.1%

Volunteer Activity Support Budget

In 2021, the Group's CSR activities were affected by the pandemic, with the Group revising some of its activities to fit the current situation as a result. Nevertheless, various support projects and charity-work, along with support to the government in Covid-19 relief were still implemented. Most of the Group's CSR activities this year focused on an inside-out development approach; i.e., from employees to society/external communities while spreading knowledge on the mutual benefits of such processes across all groups. This also encouraged a volunteering spirit among employees both during- and after- office hours. This resulted in overall volunteer activity satisfaction increasing to 93.1%.

Type of support	Amount			
	unit	2019	2020	2021
Cash Distribution	Baht (mil.)	7.7	2.9	0.7
Management Overheads	Baht (mil.)	0.9	0.7	0.01
Others (In-Kind giving: Product or Service Donation, Project / Partnership Support)	Baht (mil.)	0.8	5.0	15.0
Time (Time: Employee cost during paid working hours for volunteering work)	Baht (mil.)	2.4	3.0	0.4
Satisfaction survey for volunteer activities	%	89.0	89.9	93.1

4. MANAGEMENT DISCUSSION AND ANALYSIS

OPERATIONAL ANALYSIS

The Company's consolidated net profit after tax stood at Baht 2,220 million in 2021 as compared to the net profit after tax of Baht 3,592 million in 2020. Details of the Company's performance can be summarized as follows:

Sales and service income stood at Baht 24,447 million, reflecting a decrease of 6.53% from last year due to decreases in sales volumes, particularly in international markets, as a result of the "selective market sales" strategy coupled with the ongoing impacts of the Covid-19 pandemic in certain ASEAN countries. On the other hand, domestic sales volumes remained strong and the selling price of all asphalt products went up due to the rise in global oil prices throughout the year.

Costs of sales and services in 2021 stood at Baht 19,723 million or 80.68% of sales and services before the reversal of allowance for diminution in value of inventory and loss from commodity forward contracts. Strong gross profit margin was mainly due to the increase in average asphalt selling price as compared to the inventory cost. The Company recorded losses from commodity forward contracts of Baht 1,048 million as compared to gains of Baht 803 million in 2020, attributable to the global oil price increase.

In the 1st quarter 2021, the Company increased its shareholding from 25 percent to 62.5 percent, through the acquisition of 37.5 percent of the total issued and paid-up shares, in a related company and its subsidiary. Therefore, the Company gained control over this related company and its subsidiary which resulted in the status change from shareholding in an associate company to a subsidiary company. As a result, the Company consolidated the revenue and cost from road and runway construction contracts for the year of 2021. Revenue from construction stood at Baht 2,606 million, while costs of construction stood at Baht 2,403 million or 92.23% of the construction revenue.

Selling and administrative expenses stood at Baht 170 million and Baht 1,184 million representing 0.63% and 4.38% of total sales and services and construction, respectively. In comparison, these expenses in 2020 stood at Baht 169 million and Baht 1,209 million respectively, representing 0.65% and 4.62% of total sales and services. The Company is committed to controlling overhead expenses while improving the operating gross profit margin.

The final fire insurance claim payment, from the 2018 fire incident, of Baht 271 million was received from the insurers in 2021 by our subsidiary, Kemaman Bitumen Company SDN BHD.

Net profit after tax of Baht 2,220 million for 2021 represented earning per share of Baht 1.41 as compared to Baht 2.28 per share in the previous year.

FINANCIAL ANALYSIS

The Company's cashflow generated from operations stood at Baht 4,009 million as compared to Baht 5,591 million in 2020 due to lower profit after tax.

Financial expenses in 2021 were Baht 118 million, compared to Baht 131 million in the previous year. The decrease was mainly due to less short-term borrowing for crude financing during the year together with the reduction of interest rates.

The Company's consolidated debt to equity ratio ("D/E ratio") was at 0.56 in 2021 and 0.42 in 2020. The higher D/E ratio for 2021 was due to higher levels of debts to finance increases in receivables and inventory at the end of the year.

FINANCIAL POSITION

Changes in the consolidated financial position of the Company at the end of 2021 as compared to 2020 can be summarized as follows:

- Decrease in cash and cash equivalent from the reduction of revenue and profit after tax as compared to last year's
- Increase in trade and other receivables due to an increase in selling price together with the increase in account receivable from construction contract in 2021.
- Increase in contract assets and liabilities and advance to subcontractors was from the consolidation of a new highway construction subsidiary during the year.
- Increase in inventory value due to increase in inventory cost in line with global oil price increase despite lower inventory quantity
- Increase in assets held for sales was because a subsidiary in Singapore entered into a sales contract for an oil tanker, together with its bunker oil and other related assets with an unrelated overseas company amounting to approximately USD 13 million or Baht 446 million. As a result, a subsidiary presented its assets as assets held for sale.
- Decrease in investments in associates was from the increased shareholding which resulted in the status change from shareholding in an associate company to a subsidiary company as mentioned above.
- Increase in right of use and lease liabilities was from lease contracts of new subsidiaries in this year as mentioned above.
- Increase in intangibles assets was from recording fair value of customer relationship and backlog of the new subsidiaries.
- Increase in short-term loans from financial institutions due to higher working capital financing.
- Decrease in income tax payable due to lower profitability.
- Increase in provision for long-term employee benefits resulted from recognizing the employee benefits of new subsidiaries together with the recording of actuarial loss for the year.

KEY FINANCIAL RATIO

Key financial ratio of the Company at the end of 2021 as compared to 2020 can be summarized as follows: -

- Net profit margin decreased to 8.28% from 13.68%
- Return on equity ratio decreased to 14.70% from 25.43%
- Debt to equity ratio increased to 0.56 from 0.42

CASH FLOW

Cash flow of the Group for the year end 2021 can be summarized as follows: -

- Net cash from operating activities was Baht 744 million

- Net cash used in investing activities of Baht 469 million was mainly for additional investment in new subsidiaries as mentioned above and the purchase of equipment
- Net cash used in financing activities of Baht 848 million was mainly for the dividend payment which partial offset with increase in short-term loan from financial institutions

Potential factors or incidents that may materially affect the financial condition or the operating results

The Group considers the following factors may affect the financial condition or the operating results in the future

1. Change in government policy and/or authorities relating to budget for highway construction and maintenance which may affect asphalt demand
2. Consistency of economical feedstock supply which may affect asphalt production of the Group
3. Crude oil price volatility, the major cost of asphalt production, which may affect the overall profitability of the Group

Financial Ratio		2019	2020	2021
Liquidity Ratio				
Current ratio	(Times)	1.32	1.88	1.81
Quick ratio	(Times)	0.63	0.89	0.73
Account Receivable Turnover	(Times)	7.18	6.09	7.13
Average Collection Period	(Day)	50.83	59.91	51.20
Inventory Turnover	(Times)	4.42	3.21	3.77
Average Sale Period	(Day)	82.49	113.84	96.94
Account Payable Turnover	(Times)	6.33	4.41	7.21
Average Payment Period	(Day)	57.63	82.81	50.63
Cash Cycle	(Day)	75.69	90.94	97.51
Profitability Ratio				
Gross Profit Margin	(%)	11.32%	21.24%	18.21%
EBIT Margin	(%)	10.42%	17.06%	11.48%
Net Profit Margin	(%)	8.50%	13.68%	8.28%
Return on Equity	(%)	24.22%	25.43%	14.70%
Efficiency Ratio				
Return on Asset	(%)	15.59%	19.25%	13.54%
Total Asset Turnover	(Times)	1.50	1.13	1.18
Financial Policy Ratio				
D/E Ratio	(Times)	0.86	0.42	0.56
Interest Coverage	(Times)	18.90	34.28	26.44

5. General Information and Other Key Information

5.1 General information

Tipco Asphalt Public Company Limited

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Email info@tipcoasphalt.com

Website: www.tipcoasphalt.com

OTHER IMPORTANT INFORMATION

Stock

Stock Code TASCO (Listed on the Stock Exchange of Thailand - SET)

Registration No. 0107535000044

Registered Capital 1,578,361,570 Baht

Paid Up Capital 1,578,361,570 Baht

Ordinary Shares 1,578,361,570 Shares

Website www.tipcoasphalt.com

Registrar of Shares Thailand Securities Depository Co., Ltd.
The Stock Exchange of Thailand Building
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Tel. +66 2009 9388

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Ms. Krongkaew Limkittikul
Certified Public Accountant Registration No. 5874 and/or
Mr. Natthawut Santipet,
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Ms. Siraporn Ouaanunkun
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193/136-137 Rajadapisek Road, Klongtoey, Bangkok 10110

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5.2 Other material facts

N/A

5.3 Legal Disputes

As of 31st December 2021, there were no material litigations against the Company or its subsidiaries which could have a negative effect on our assets exceeding 5% of shareholders' equity. In addition, there were no lawsuits, which could have a significant impact on our business.

Part 2 :

Corporate Governance

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6. Corporate governance policy

6.1 Overview of Corporate Governance Policy and Practices

The Board of Directors recognizes the importance of corporate governance in the Company's sustainable development, creating shareholder value, and securing trust from all stakeholders, including shareholders, employees, customers, business partners, competitors, and creditors.

The Board of Directors and management have therefore been promoting good corporate governance practices within the Company, its subsidiaries and its affiliates.

6.1.1 Policies and guidelines on the Board of Directors Corporate Governance Policy

The Board of Directors of the Company continuously strive for good corporate governance practices in order to maintain the Group's sustainable development. The Group strives to protect and promote the interests of all stakeholders by observing ethical business practices based on transparency and traceability.

The Group has established the following corporate governance policy for the Board of Directors, management, and the employees to abide by:

1. The Board of Directors shall take the lead in matters of business ethics by setting the Code of Ethics to manage and monitor the Group's operations to ensure all business activities are conducted in accordance with the applicable laws and ethical standards.
2. The Board of Directors shall play an important role in the development of strategies, policies, and action plans, taking into account all pertinent risk factors, for the best interests of the Group;
3. The Board of Directors shall strive to add value to the business in the long run as well as manage the business with prudent practices in order to maximize shareholders' returns. This will be achieved while maintaining the highest standards of social responsibility throughout.
4. The Board of Directors shall encourage shareholders to be aware of their rights as owners of the Group, including their right to appoint the Company's Directors to act as their representatives. Shareholders are also eligible to make decisions related to any significant changes in the Group;
5. The Board of Directors shall treat all shareholders, including minority shareholders, fairly and equally;
6. The Board of Directors shall create the optimal balance between the existing needs and future expectations of the Company and all stakeholders respectively, based upon sustainable, mutual, and equitable benefits; and
7. The Board of Directors shall disclose information, both financial and non-financial, correctly, adequately, transparently and traceably through appropriate bilateral communication channels for the benefit of stakeholders' decision-making.

COMPOSITION AND APPOINTMENT

1. The Board shall consist of at least 10 directors, but not exceed 14 directors. At least half of the total number of directors must have residence in the Kingdom of Thailand;

2. At least one-third of all directors must be independent directors, the minimum number of independent directors being three;
3. The Board of Directors shall elect one director to be the chairman of the Board (“Chairman”) and one director to be the vice chairman (“Vice Chairman”) of the Board. The Vice Chairman is entitled to perform any act under the Articles of Association on behalf of the Chairman;
4. The positions of Chairman of the Board and Chief Executive Officer are not to be held by the same individual for the sake of clear-cut segregation of roles and responsibilities; and
5. The appointment of Directors must be based on transparency and clarity and shall abide by laws, regulations and relevant rules.

BALANCE OF NON-EXECUTIVE DIRECTORS

The Board of Directors has 14 members, consisting of:

Independent Directors	5
Non-executive Directors	4
Executive Directors	5

SEPARATION OF POSITION

The positions of Chairman of the Board of Directors and Chief Executive Officer are not held by the same individual.

POLICY ON DIRECTOR QUALIFICATIONS AND NOMINATION

The Board of Directors should be composed of directors who have all the necessary qualifications as prescribed by the law. There should be diversity in the educational backgrounds and credentials of the various members of the Board, which allows the Company to benefit from a range of different experiences and viewpoints. There is to be no discrimination based on gender, age, ethnicity or nationality in the Board’s operations.

The N&R committee is responsible for prescribing a set of knowledge and expertise requirements for the Board of Directors, and for formulating a Board Skill Matrix to help inform the selection and nomination of qualified candidates.

These might include:

- Strategic planning;
- Industry knowledge;
- Accounting and finance;
- International marketing;
- Organization and human capital management;
- Risk management.

At least one of the non-executive directors should be experienced and competent in the Company’s main industry.

In 2021, the N&R committee reviewed and confirmed that the Board of Directors covered between them all 6 of the required skills. As part of a new director nomination, the N&R committee may consider the director pool from the IOD for potential candidates, if any.

QUALIFICATIONS FOR DIRECTORS

In selecting candidates to be appointed as the Company's Directors, the Nomination and Remuneration Committee is empowered to screen and nominate qualified persons. The desirable characteristics for a director include:

1. Integrity and accountability;
2. Competency in financial, commercial or industrial matters and skills/capacity to provide strategic insight and direction;
3. Experience in corporate management;
4. Good interpersonal and communication skills;
5. No conflict of interest or prohibited characteristics as specified in the Public Limited Company Act B.E. 2535; and
6. Independent Directors shall possess the qualifications as specified in the Securities and Exchange Commission's guidelines and the Company's definition of an Independent Director.

Directors may hold directorships in no more than five listed companies, provided these holdings do not adversely affect their work as Directors of the Company.

TERM OF OFFICE

1. In every annual general meeting of shareholders, one- third of Directors shall vacate in proportion. If the number of Directors is not a multiple of three, the number of directors closest to one-third shall vacate;
A Director who vacates under this section is eligible to be re-elected;
2. In the case of a vacancy in the Board of Directors for reasons other than the termination of a term of office, the Board of Directors shall elect a person who has the necessary qualifications, and is not under any of the prohibitions under section 68 of Public Limited Company Act B.E. 2535 as the substitute director at the next meeting of the Board of Directors, unless the remaining term of office of said Director is less than two months;
The resolution of the Board of Directors under the above paragraph shall be a vote of at least three-fourths of the number of Directors remaining;
The substitute Director under paragraph one shall hold office only for the remaining term of office of the Director whom he or she replaces;
3. The term of office of the Chairman is two years;
4. In addition to vacating office upon termination of the term under the Public Limited Company Act B.E. 2535, Directors shall vacate office upon:
 - 4.1. Death;
 - 4.2. Resignation;
 - 4.3. Being disqualified or being under any of the prohibitions;
 - 4.4. Removal by a resolution of the meeting of shareholders; and
 - 4.5. Removal by court order.
5. Retirement age is 75;
6. A member will be allowed to retain his/her directorship after his/her 75th birthday and remain as Director until his/her three-year term expires; and
7. Any Director wishing to resign from office shall submit his or her resignation letter to the Company and the resignation shall be effective from the date on which the Company receives the resignation letter

COLLECTIVE AND INDIVIDUAL SELF-ASSESSMENT OF THE BOARD OF DIRECTORS

The Board Self-Assessment form designed by the Stock Exchange of Thailand (“SET”) is for consideration by the Board of Directors of listed companies. The assessment consists of (i) A collective Self-assessment and (ii) Individual Self-assessments. The main objective of the self-assessment form is to evaluate the performance of the Board as a team, and of the Directors as a collective body as well as on an individual basis, in light of recognized best practices and principles of good corporate governance. The procedures are as follows:

1. The non-executive directors perform self - assessment evaluations under guidelines provided by the SET;
2. The Company Secretary summarizes the self-assessment results of all members of the Board of Directors; and
3. The Company Secretary reports the self-assessment results to the Board of Directors and ensures the results are used to improve the performance of the Board.

REMUNERATION FOR DIRECTORS

The N&R committee is responsible for the competitive remuneration of the Board of Directors and sub-committees. In determining appropriate remuneration, the N&R committee takes into account the scope of responsibilities of each director and the Company’s long-term strategies and targets, to ensure that remuneration is comparable with the average for similar companies in the relevant industries. The final remuneration is proposed to the Board of Directors and shareholders for approval.

NOMINATION OF THE CHIEF EXECUTIVE OFFICER

The Board of Director shall consider for approval candidates proposed for the position of Chief Executive Officer, as nominated by the N&R committee. The assessment of the prospective Chief Executive Officer is based on criteria including

- (1) knowledge of and experience in the asphalt, petroleum and road-construction industries;
- (2) good relationship with relevant networks in our industries; and
- (3) possessing the desired competencies of leadership stipulated in the Group’s Core Values.

NOMINATION OF THE TOP EXECUTIVE

Nomination of candidates to the positions in Chief Level (C-Level) is finalized by the Chief Executive Officer. Sets of selection criteria, derived from a workshop with top management conducted by Development Dimensions Internationals Inc. (“DDI”), include:

- (1) Relevant knowledge and experiences in job scopes;
- (2) Specific competencies desired in the Tipco Asphalt Group – financial acumen, customer focus, inspiring excellence, and energizing the organization;
- (3) Selection of leadership competencies relevant to four business drivers
 - a. Penetrate and grow global business
 - b. Create competitiveness through business alliance
 - c. Enhance organizational talent
 - d. Promote an efficient and innovative culture

POLICY ON THE CHIEF EXECUTIVE OFFICER AND TOP EXECUTIVES HOLDING POSITION IN ORGANIZATIONS OUTSIDE THE COMPANY

The Board of Directors has established a policy allowing the Chief Executive Officer and top executives to hold directorships in companies that are not subsidiaries or associate companies of the Company. The CEO and top executives may hold directorships in no more than three listed companies, provided such holdings do not adversely affect their work.

In order to enable the CEO and top executives to dedicate their time to the performance of their duties for the utmost benefit of the Company, the CEO and top executives must not serve as executives, executive directors, or CEOs in companies other than the Company's subsidiaries or associate companies.

REMUNERATION FOR THE CHIEF EXECUTIVE OFFICER AND EXECUTIVE DIRECTORS

The N&R committee assesses the performance of the Chief Executive Officer and Executive Directors, and proposes their remuneration packages for approval by the Board of Directors' by taking into account the following information:

1. Performance-based Pay – The pay shall be subject to the achievement of the Group's performance, based on Key Performance Indicators (KPIs) of Financial, Customer, Internal/Business process and Learning and Growth Perspectives. Achieving annual performance targets is a short-term incentive that is updated yearly.
2. Strategic Initiatives of the Group – the progress of corporate strategies per the Vision 2025 to add value to the business and its shareholders. In accordance with our long-term commitment to sustainable development for 2025, annual targets are set up for each sustainable development strategy including: Innovation leader, eco-efficiency operations, and safety awareness.
3. Competitive compensation policy – the compensation is benchmarked with other listed companies in the same industry, adopting an entrepreneurial approach with emphasis on the performance-based bonus in order to be competitive with other companies.

REMUNERATION STRUCTURE OF THE CHIEF EXECUTIVE OFFICER AND EXECUTIVE DIRECTORS

The package includes remuneration paid in cash i.e. salary, which is reviewed annually; the bonus is variable and dependent on yearly performance. Other forms of compensation include the provident fund scheme, and health and life insurance policy(ies).

Policy on the appointment of directors and top executives to subsidiary/associated company

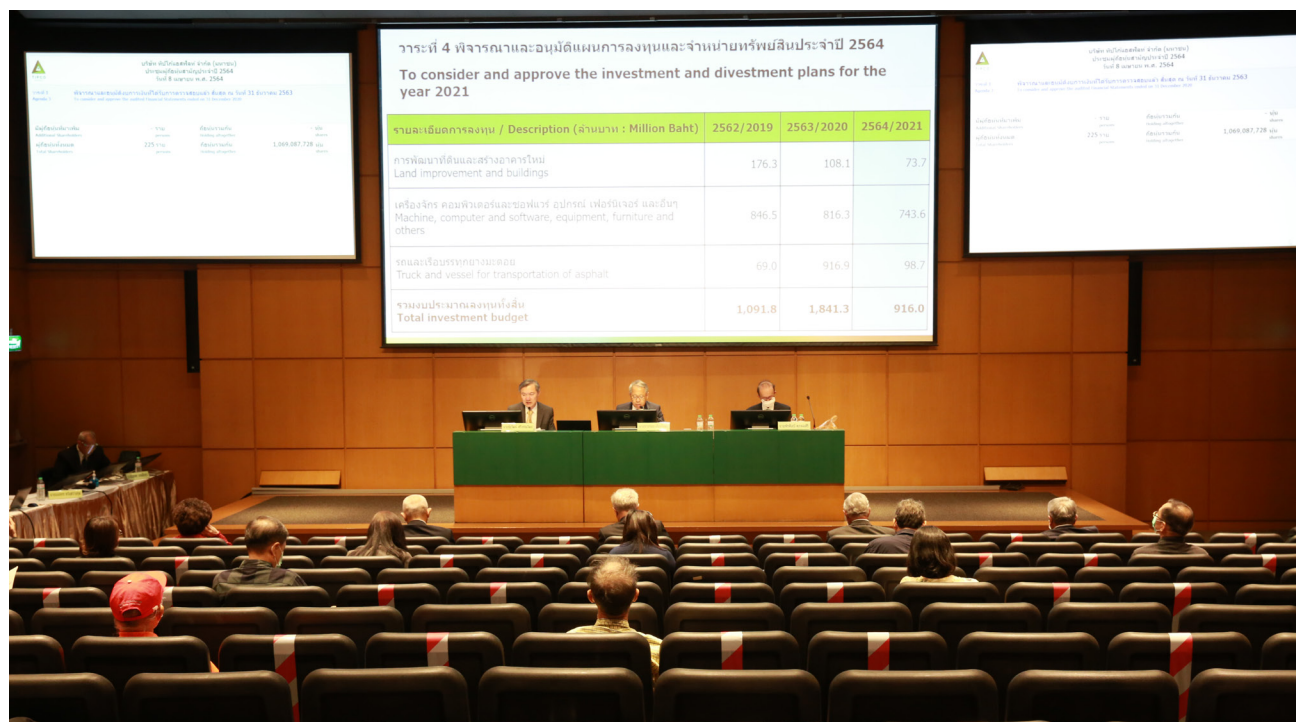
The Board of Directors has assigned the Chief Executive officer to appoint and transfer the Company's representative to the Board or executive position in a subsidiary/associated company in accordance with shareholding proportion. Such an appointment or transfer shall subsequently be reported to the Board of Directors.

Roles and responsibilities of director of subsidiary/associated company

1. Ensuring that the subsidiary/associated company complies with relevant laws, regulations, Articles of Association and policy;
2. Acting in the best interest of the subsidiary/associated company and ensuring that the direction of the subsidiary/associated company's strategies, policies, and business plans are consistent with those of the Company;
3. Reporting the operating results and performance of the subsidiary/associate company to the Company on a regular basis;
4. Ensuring the subsidiary/associated company's compliance with the requirements of the Stock Exchange of Thailand where such requirements are applicable to the subsidiary/associate company, e.g. entering into related party transactions, acquisition or disposal of significant assets;

5. Ensuring that the subsidiary/associated company has appropriate and adequate internal control systems;
6. Performing any other duties in accordance with the Board of directors of the subsidiary/associate company and/or the shareholders' meeting of the subsidiary and associated company;

6.1.2 Policies and Practices related to Shareholders and Stakeholders



RIGHTS OF SHAREHOLDERS

The Company shall ensure that (i) shareholders, both as investors and as owners of the Company, are entitled to all basic rights and adequate information in the Annual General Meeting (“AGM”) and the AGM minutes; (ii) the Chairman of the meeting and each sub-committee attend the AGM in order to communicate with the shareholders; and (iii) the Company’s shareholder structure is in compliance with relevant rules and regulations and corporate governance practices. The basic rights of the Company’s shareholders are as follows:

- Prior to the 2021 Annual General Meeting (AGM), shareholders of the Company were entitled to propose agendas and questions for the 2021 Annual General Meetings. Shareholders were allowed to exercise such rights from the period 6th October 2021 to 30th December 2021 for consideration by the Board of Directors. Should any proposed agenda be included in the meeting, the Company will specify in the notice of the meeting that said agenda was proposed by a shareholder. However, in the case where the proposed agenda was rejected, the Company will inform shareholders of the reasons for its rejection at the annual general meeting of shareholders. Moreover, any shareholder is entitled to nominate any qualified candidate for election as a Board member in advance. The Nomination and Remuneration Committee will consider the proposed nominee(s) together with other nominated persons according to the Company’s criteria for the nomination of directors. The Nomination and Remuneration Committee shall then present the nominee(s) to the Board for consideration before proposing them to the shareholders’ meeting for approval.
- Shareholders (individuals, juristic persons, and institutional investors) are encouraged and facilitated to attend and participate in the AGM. The Company provides a Proxy Form B to shareholders who are unable to attend the AGM in person. In addition, institutional investors are invited to nominate their representatives to attend the meeting.

- An agenda concerning the Board's remuneration is included to inform the shareholders of the amount and type of remuneration received by each director, including fixed and variable remuneration, meeting allowance, and the Board's bonus. Other remunerations, if any, are also stated.
- Notice of the AGM shall consist of precise and adequate data for decision-making by shareholders. In addition, the minutes of the last AGM are included, which outline the voting method, results, and any questions and comments made by shareholders.
- Shareholders are entitled to basic rights such as the right to receive dividends, propose agendas, nominate a person to be director, and approve certain matters.
- The Chairman of the Board of Directors and the Chairmen of all sub-committees attend the AGM to communicate and inform shareholders on matters relating to sub-committees
- On the date of the meeting, the Company uses a barcode system for registration for the convenience of shareholders, since each reference number is already included in the registration and proxy forms. For each agenda, the Company will collect the ballot papers of shareholders who vote "disapprove" or "abstain" in order to deduct the votes from the total entitled voting rights. The Company also applies a barcode system to perform the ballot calculation to ensure immediate voting results are available for announcement right after the end of each agenda. Shareholders are entitled to verify each voting result after the meeting.
- One-third of the directors must retire from office on a rotation basis in each AGM, and the election of directors to replace the retired directors takes place during the meeting. However, if the number of candidates exceed the number of directors required, each candidate is then elected individually.
- At the meeting, shareholders can freely express their opinions, give suggestions, and raise questions on any agenda item before casting votes, thus ensuring that shareholders have sufficient information on the matter. Should shareholders have questions or inquiries, specialists in each field are available to answer queries on behalf of the Board of Directors.
- Shareholders who arrive after the meeting has commenced are able to vote on agenda items being considered, provided that a resolution has not yet been made. They will constitute part of the quorum starting from the agenda item.
- The Company's ownership structure in 2021 followed good corporate governance practices. For instance, shareholding by Directors in the aggregate did not exceed 25% of total paid-up capital. In addition, free float accounted for 39.44% of total paid-up capital.

Throughout the Covid-19 pandemic, shareholder safety during the AGM was the Company's top priority. In response to this, the Company informed shareholders on guidelines in holding the 2021 AGM with the following details:

- The Company encouraged shareholders to appoint independent Directors of the Company to attend and vote on their behalf instead of physically attending the AGM;
- Alcohol gel was provided in front of the meeting room. Shareholders attending the AGM were screened before entering the meeting area. Anyone with a body temperature of 37.5 degrees Celsius or higher was denied entry to the AGM. For those shareholders attending the meeting in person, wearing a face mask was mandatory at all times during the meeting;
- Shareholders who were denied entry to the AGM were entitled to use proxy voting by appointing an independent director to vote on their behalf;
- Seats in the meeting rooms were set one meter apart;
- Food, tea and coffee were not served before or during the meeting. However, bottled water was available at the AGM; and

- The Company encouraged shareholders to submit their questions in advance. The Company endeavored to clarify and reply to shareholders via e-mail separately after the meeting.

Thanks to a set of thorough and clear guidelines and conscientious cooperation from all shareholders, the 2021 AGM was held successfully without any postponement. This truly reflects the power of resilience within the Company despite the many challenges of the Covid-19 pandemic.

EQUITABLE TREATMENT OF SHAREHOLDERS

The Company treats all its shareholders equitably, be they major or minor, individuals, institutions, locals or foreigners. To this effect, the Company strives to find means to ensure equality, especially for minor shareholders. These include:

- Shareholders have the right to vote at meetings according to the number of shares they own, whereby one share accounts for one vote, and no particular share takes precedence over the rights of other shareholders.
- Shareholders have the right to nominate candidates for directorship via the channels which the Company provides.
- The Company has an established policy governing the use of internal information and has incorporated it into employee regulations with penalties for executives or employees who disclose internal information to outsiders for personal benefit.
- The Company's Code of Ethics includes guidelines that prohibit employees from using the Company's assets, and from spending working hours conducting research, contact, or business with brokers for personal gain or for the benefit of any related parties.
- Under the Company's Code of Ethics, top executives and employees working in related departments are prohibited from trading Company shares for 21 days prior to the release of the Company's quarterly and annual financial statements (blackout period). In addition, the Board of Directors will monitor all required actions in accordance with the related standards. Any changes in the shareholding of directors are reported in the Board of Directors' meetings. These are included in the agenda of the Board of Directors meetings on a quarterly basis.
- Ordinary business transactions and ordinary business support transactions are approved by the Board of Directors according to section 89/12 of the Security and Exchange Commission Act. The standard related party transaction relies on a fair and arm's length basis. Such transactions are reported to the Board of Directors on a quarterly basis. All other related party transactions are determined by Notification of the Capital Market Supervisory Board No. Tor. Jor. 21/2551.
- Any acquisition and disposal of assets which are subject to shareholder approval are determined by the Notification of the Capital Market Supervision Board No. Tor. Jor. 20/2551.
- The Company has a clear and transparent shareholder structure. There is no cross-holding of major shareholders, thereby preventing any conflicts of interest or transfers of benefits from one party to another. The shareholder structures of the Company and its subsidiaries are published in the Company's annual report, along with the holding of Board members' shares in the Company.
- The Company provides shareholders with proxy forms for the appointment of other individuals or of one of the Company's independent directors to act on their behalf. These forms have been prepared in compliance with the specifications defined by the Ministry of Commerce, in which the shareholders can exercise their voting rights as wished. These forms can also be downloaded from the Company's website. In addition, the Company provides shareholders with duty stamps to be sealed on the proxy forms for their convenience.

- The Company ensures that shareholders have adequate time to prepare for AGM attendance. In 2021, notice of the AGM was posted on the Company's website one month before the AGM date, and submitted to shareholders 21 days in advance. The notice of the AGM was issued in both Thai and in English.
- There is a clear separation of duties and responsibilities of the Board, management, and shareholders, thereby ensuring no overlap in their duties and responsibilities. Any member of the Board of Directors or executive who may have interests in an agenda item under consideration in a Board meeting must abstain from attending the meeting and from voting on said matter. This is to ensure that the Board of Directors and executives make decisions in a fair manner for the utmost benefit of all shareholders.

THE ROLE OF STAKEHOLDERS

The Board of Directors places great emphasis on contributions from all its stakeholders: shareholders, employees, customers, suppliers, creditors, business partners and competitors. All stakeholders are invited to work with the Company towards their shared goals and mutual benefits, while making the Company a competitive and successful business.

We therefore adhere to the principle of fulfilling our corporate social responsibilities as well as our contractual obligations, as they pertain to our stakeholder relationships.

SHAREHOLDERS

Shareholders have basic rights stipulated by law and by the Company's regulations, such as the right to expect a fair return, to request a verification of their number of shares, to receive share certificates, and to attend, vote and freely express their opinions at shareholders' meetings. All shareholders will receive detailed information concerning dates and agendas prior to the shareholders' meeting. Such information will be posted on the Company's website around one month prior, and related documents are submitted to shareholders at least 21 days before the meeting. The shareholders' right to attend the meetings and their right to vote on resolutions are clearly stated in the notice of the meeting submitted by the Company.

The Company also believes that shareholders, as owners of the Company, have the right to make suggestions and comments on the affairs of the Company.

EMPLOYEES

Compensation Management – The Group's compensation management has been developed under the auspices of the Nomination and Remuneration Committee and is based on the principle of a merit-based pay structure with internal fairness and competitiveness in the labor market. The pay structure is made according to job value under standardized job levels.

The remuneration package is based on performance and job responsibility of each job level. External factors that are taken into consideration include economic indicators such as inflation rates, while labor market compensation packages are benchmarked against other organizations in related industries.

Our balanced scorecards' KPIs are designed to align short- (one year basis) and long-term targets (continuing through to 2025's vision), with cash-based pay incentives.

Welfare Management – The Group has established welfare systems which are communicated to all employees in the Employee Handbook, regularly updated through online and internal communication channels. The objective is to provide appropriate and sufficient welfare to all employees from first entry to retirement:

- Work-related welfare on the job e.g., daily allowance, transportation, accommodation and travel insurance, workplace relocation allowance
- Health-related welfare e.g., medical insurance that includes dental service, annual medical check-up, seasonal influenza vaccination, and on-site fitness facilities
- Well-being support e.g., provident fund, long-service and retirement awards, financial aid for demise and disability, emergency loans
- Well-being in Covid-19 precautionary and treatment packages.
 - (1) Introduction of ISO/PAS 45005:2020 Occupational health and safety management—General guidelines for safe working during the COVID-19 pandemic at workplaces in head office and branch offices, on top of the government’s requirement on pandemic control
 - (2) Provision of self-administered antigen testing kits and RT-PCR expenses for high-risk groups in work-related environments
 - (3) Support of medical treatment expenses and quarantine expenses incurred from work-related travel
 - (4) Support of vaccination – both state service, and privately-booked services.



Long-term incentive – The Group has established a provident fund program since 2004. In 2021, the provident fund committee of the Group started to allow employees who are in the provident fund scheme to voluntarily increase their contribution rate from 5 percent maximum to 15 percent each month, starting from November’s pay schedule. This has enabled employees to increase their long-term savings and takes tax privileges from the provident fund allowance. The Group continues to match up monthly contribution at an equivalent amount as the employee’s at 5 per cent maximum.

To promote employee understanding of compensation packages, the Human Capital Management department conducted communication sessions at all our plants, and at Head Office in 2020. 2 topics, the design of the compensation structure and the benchmarking process with certain industries, were covered. During the sessions, employee feedback was specifically sought. By early 2021, the communication session should cover all locations in Thailand.

Employee Development and Training:



Learning is part of the Group’s aim to becoming a globally preferred integrated asphalt “Innovative Solutions Partner”. Our knowledge and expertise stem from our long experience in the asphalt industry, which enables us to develop innovative solutions to meet future challenges.

The Group has developed its training and development initiatives by turning our long-term experience into a specifically-designed curriculum of technical asphalt knowledge. This is tied to the Organizational Knowledge Management Policy, which aims to preserve and develop organizational knowledge that is critical to the performance efficiency of staff members and to the Group’s competitive advantage.

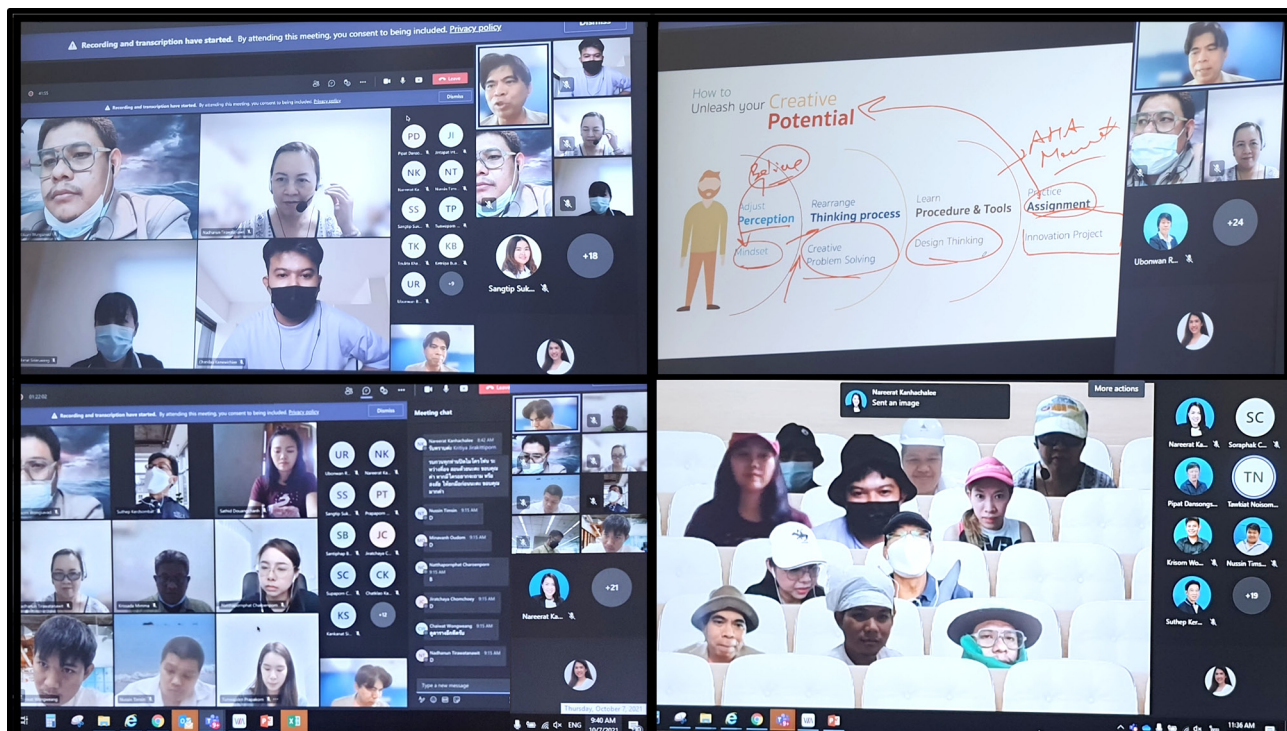
Our employees, line managers, and Human Capital Management team are jointly responsible for translating this plan into action. Each job family in the Group has established a Job Competency Profile as a framework for development and learning, catering to both lateral and vertical professional development. Managers are responsible for guiding and coaching employees to succeed in their careers.

Due to strict measures relating to the ongoing COVID-19 pandemic in 2021, in-person training and development was almost null. Online learning, either live or through recorded sessions, became the norm. Due to travel restrictions and work from home measures requiring work-shift arrangements to maintain business operations, average training hours/person/year in management and technical subjects will be slightly below the yearly target of 24.

Among all training topics, the Innovation Bootcamp was specifically designed to stimulate an innovation culture and to equip pilot groups of employees in Thailand and international subsidiaries with the tools and know-how to create innovation projects. Participating teams included 10 teams from our Thailand operations, and 9 teams from Vietnam, Malaysia and Indonesia combined.

Talent Development and Performance Management

A performance culture supported by differentiated development is key to the delivery of individual and business objectives. This is driven by the alignment of clear and challenging assignments, and by ensuring that employees are aware of how their work impacts business.



The manager and employees work together to ensure that clear objectives are set and regularly evaluated (at least twice a year). This allows managers to identify high performers and reward them accordingly, while ensuring low performance is properly managed with integrity. Employees receive regular feedback on their performance and career aspirations through a variety of tools and processes such as the Performance Management System (PMS) and Job Competency Profile. Specific groups of higher performers and high potentials are invited to participate in extensive development programs such as the New Wave. It is the responsibility of Top Executive Talent Program Managers to dedicate the necessary time to monitoring current objectives, and to provide regular coaching to employees throughout the year. Each employee, supported by a direct supervisor and manager, is in charge of her or his own professional development.

Regarding the Group's direction in relation to international markets, employees who are interested in international assignments can be given the opportunity to work in different countries. The international dimension of the Group is used as a competitive advantage to retain and develop talent.

Our promotions are based on sustained performance relating to results and behavior, as well as future potential. The Group undertakes an active succession planning process from top to middle management by defining key positions to ensure that there is a strong pipeline of successors ready to meet future needs. Human Capital Management provides support for implementing the necessary tools, and collaborates with function heads and managers to prepare the necessary resources for the continued development of the Group's employees.

HUMAN RIGHTS

The Group continuously strives to regulate its corporate governance practices. The Board of Directors has approved the Social Responsibility Policy stating our direction to respect and support the human rights of employees and all stakeholders in the value-chain of the Group's business, and to refuse to support any activities that violate such human rights. We are committed to implementing mechanisms to resolve human rights disputes for the mutual benefit of the Group and of our stakeholders.

HUMAN RIGHTS POLICY

1. The Group will take active measures to identify, correct and prevent any violation of human rights (whether such human rights are defined by any legislations or international practices) that could impact the stakeholders of the Group. The Group will also review all risks that have an impact on human rights and will take proactive measures to manage such risks;
2. The Group shall implement and develop mechanisms to resolve human rights disputes for the mutual benefit of the Group and of our stakeholders. The Group will work with all stakeholders to achieve a common understanding regarding our position on human rights;
3. The Group shall respect the rights of employees and all stakeholders without any discrimination regarding beliefs, nationality, ethnicity, gender, religion, marital status, sexual orientation and satisfaction, nationality, age, or disabilities. The Group shall raise awareness on human rights for underprivileged groups in the value-chain of the Group's business;
4. The Group shall promote civil rights, political rights, economics rights, social and cultural rights among all employees and stakeholders in the Group;
5. The Group shall respect the personal security and freedom of association of all its members, and will not tolerate harassment, or harsh or inhumane treatment in the workplace; and
6. The Group shall promote the improvement of working conditions regarding the humanity, health and safety of its employees, and will not tolerate any form of forced, bonded or indentured labor and child labor.

The practice of human rights has been deployed to all functions in the value-chain. Results of these practices are reported in the sustainability report each year.



CONFLICT OF INTEREST

The Group continuously strives for good corporate governance practices in order to maintain its sustainable development. To ensure professionalism and integrity in conducting our business, the Group has reviewed its Code of Ethics to minimize potential conflicts of interest between employees and the Company. Potential conflicts of interest covered by the Code of Ethics include those involving family members of employees - parents, full-blooded brothers/sisters, legal spouses, children and adopted children.

While all employees and directors are required to acknowledge their review of the Company's Code of Ethics, there is also an additional requirement that the Board of Directors, all Management, and all employees in sales, procurement and purchase, sign and submit the "Conflict of Interest: Acknowledgement and Disclosure Form". They have a responsibility to promptly notify the Group management in writing, with an acknowledgement by the Chief People Officer, if they, at any time, become aware of any actual or potential conflicts of interest, or if the information provided becomes inaccurate or incomplete.

Therefore, all actual and potential conflicts must be disclosed whenever management and employees are discussing and making decisions related to any business matter.

CUSTOMERS

To develop and maintain sustainable relationships, the Company makes sure that customers receive equitable benefits in service, quality and price. A new Customer Support Office was established to provide product information, solve problems, and receive complaints in a way that can improve quality, service and ensure total satisfaction.

- Providing products and services commensurate with prices that fulfill their intended purposes while meeting customer needs.
- Providing products and services by taking into consideration the products' life cycle in order to better reduce their social and environmental impacts.
- Providing factual, non-deviant information about products and services, such as price, product quality, product characteristics in terms of health and safety, which support customers' decisions.

- Establishing fair agreements that are mutually beneficial to both the Group and our customers.
- Protecting the health and safety of customers through product research and development.
- Providing timely and meaningful support in response to any complaints and conflicts with customers.
- Protecting information to preserve the rights and privacy of our customers.
- Providing knowledge and awareness to our customers to highlight fairness of procurement and sustainable consumption.

Issues of Concern:

- 1) Our relationships with customers shall not interfere with or jeopardize our business professionalism.

CREDITORS

The Group conducts its business in a manner that fully complies with the terms and conditions of its loans and obligations to all financial creditors, the details of which are as follows:

- The Group seeks the Board of Directors' approval before entering into a new loan or borrowing relationship, and provides information on all major terms and conditions under any such new loan, i.e. financial covenants, guarantee requirements, etc.
- Once the loan agreement is executed, the Group monitors it at all times to ensure that all conditions are fully complied with.
- For financial covenants, the Group examines for full compliance after month-end account closing. All conditions and covenant compliance checks are reported to the Board by an external auditor on a quarterly basis.
- In cases where there are any adverse material conditions which may affect the ability of the Group to comply with all the terms and conditions, management is obligated to inform the Board immediately to ensure all parties are aware of such adverse conditions, and to collectively seek solutions to prevent the breach of the conditions.

BUSINESS PARTNERS

Operating within a competitive business context requires the building and maintaining of trust. The Group strictly adheres to its Code of Ethics, honors its promises and upholds its commitments to trading partners in every way, including quality products and timely delivery.

- Following policies and procedures of the Group's procurement and purchasing processes.
- Selecting business partners with fairness, by comparing prices, services, technology, quality, and retaining traceable records accordingly.
- When procuring, priority must be given to business entities, except in cases where individual expertise is needed (or offers higher benefits to the Group's operations).

Issues of Concern:

- 1) Prudence/caution in selecting vendors who are relatives or are related to employees of the Group.
- 2) Making sure not to select business partners whose standards are incompatible with the Group's (such as labor practices, environmental laws, or other industry norms).

COMPETITORS

The Group also operates within a competitive business context by being fair and strictly following laws, as well as its own Code of Ethics in its dealings in the industry and markets.

- Never coercing or defaming competitors – directly or indirectly; bullying, setting trade barriers that would unfairly lessen competitors’ opportunities.
- Being careful in maintaining relationships with competitors since they could be customers of our affiliates/ subsidiaries.
- Never disclosing the Group’s intellectual property, or any of its confidential information, such as pricing policy, contractual conditions, product lists, market research reports, production plans or production capacity.
- Never violating legal rights of competitors.
- Never setting agreements with competitors or persons that shall decrease or limit their competitiveness.

Issues of Concern:

- 1) Being wary of entering any binding agreements that may restrict customers’ choice of purchase.
- 2) Being wary of setting prices or selling conditions that might be unfair to customers.

NO INTELLECTUAL PROPERTY INFRINGEMENT

The Company has established policies and guidelines in its Code of Ethics whereby no intellectual property infringement can take place. These guidelines on Information and Assets are as follows:

- Recording and reporting information accurately, completely and based on facts.
- Retaining and processing information according to schedules and guidelines established by the Group, and in accordance with the law.
- Restricting the use of electronic equipment, electronic data, or information technologies that are not in compliance with IT policies and regulations. Usage of such equipment, data and technologies for personal or other benefits, especially related to politics, is strictly prohibited.
- Securing and never allowing unauthorized individuals access codes to gain entry into the Group’s information systems.
- The Group reserves the right to inspect its employees’ usage of electronic equipment data, electronic equipment, and information technologies, such as the transfer and storage of data, without seeking permission of the relevant assigned users.
- Securing the Group’s intellectual property from unauthorized use or disclosure.
- Any output derived from an employee’s performance on the job is to be regarded as the property of the Group, unless the Group specifically states that the intellectual property produced belongs to its inventor, creator, researcher, or any other person.
- Employees must take care of their work to ensure that reports, information, formulas, statistics, programs, techniques, processes, and facts representing the intellectual property of the Group are not violated.
- Employees must surrender all intellectual property to the Group upon termination of their employment, or as otherwise stated by the Group.
- Complying with the intellectual property laws that apply to the country in which the Group is operating, and consulting with the appropriate intellectual property experts to seek advice for proper understanding.
- Avoid disclosing information that might affect the Company’s stock price to external parties.

- Avoid giving advice on buying or selling the Company's stock unless specifically assigned by the Company to do so.
- Employees and other persons in charge of the Group's information are prohibited from disclosing or conveying corporate information or secrets to unauthorized persons, including their family members, relatives, and friends.

Issues of Concern:

- 1) Informing, presenting, or disclosing corporate information or documents, in any form, to any unauthorized persons inside or outside the Company.
- 2) Hiring or engaging with other external individuals, departments or business entities without prior agreement in writing from the Group as stipulated in the Company's intellectual property policy.
- 3) Copying, adjusting, or revising electronic equipment, electronic data, or information technologies without a proper reason.
- 4) Disclosing or conveying information to persons or organizations not otherwise entitled to receiving such information.
- 5) Spreading rumors or giving information that would affect the Group.

ANTI-CORRUPTION

The Board of Directors of the Company adopted an anti-corruption policy with the ultimate aim of preventing corruption across all value-chain activities while maintaining vigilant operations.

ANTI-CORRUPTION POLICY

The Group continuously strives for good corporate governance practices in order to maintain the sustainable development of the Group. The Group has established an anti-corruption policy with the purpose of preventing corruption in every activity of the value-chain of the Group's business.

CORRUPTION: DEFINITION

Corruption includes any type of bribery, such as an offer, a promise, a guarantee, an inquiry, or the acquisition of money, or asset, gift item, or any other inappropriate benefits to/from government officials, private sector staff, either by direct or indirect action such that a person could proceed with, or disregard his/her function, in order to acquire or retain business, recommend a specific company to the Group as a whole, or achieve any improper benefits in a business transaction.

The above policy is reflected in the context of scrupulous observation of the following considerations:

- A zero-tolerance policy in regard to corruption by any person including directors within the Group;
- The Board of Directors will determine and promote the implementation of the anti-corruption policy and lead by example;
- The Board of Directors will govern and manage the Group's business operations in order to comply with the anti-corruption policy, and will communicate any anti-corruption actions to all stakeholders through the various communication channels;
- The Group will continuously promote and encourage all employees and stakeholders to raise awareness for the eradication of corruption; anti-corruption will be part of the orientation program to new employees and all employees shall annually acknowledge the Code of Ethics which includes anti-corruption;

- The Group establishes strict penalty protocols for staff and Board of Director members who do not comply with the Anti-corruption Policy. These punishments include termination of employment contract or directorship; and
- The Group will regularly review and improve business operations in order to comply with any changes in relevant laws and anti-corruption guidelines at all times. Anti-corruption risk assessment has been performed by the Risk Management Committee (through the Risk Management Office) to constantly identify related risks, corresponding likelihood and impacts including internal controls and related working instructions to mitigate residual risks.

In addition, the Risk Management Committee established guidelines on corruption-prevention with a regular monitoring system, the results of which will be reported to the Board of Directors.

Finally, the Company had joined the “Thailand’s Private Sector Collective Action Coalition Against Corruption” (CAC) and was certified on 10th November 2017 and recertified on 30th June 2020.

DISCLOSURE AND TRANSPARENCY

Disclosure and transparency are top priorities for the Group. Disclosure of the Group’s general and financial information is done in an accurate, complete, transparent, and timely manner. The disclosed information includes the Group’s structure, its performance and risks, director profile, and information related to investors.

Since 2018, the Board of Directors has established a disclosure policy in accordance with the current laws and best practice guidelines of the Securities and Exchange Commission and the Stock Exchange of Thailand. The disclosure policy clearly states the scope of disclosure of information, authorized spokespersons, management of inaccurate information and information leakage, silent period and trading restrictions.

- All relevant information is disclosed via the annual report, Form 56-1, Company’s website and SET’s website. The disclosure of information and quality of financial statements in the Annual Report, Form 56-1, and the Group website are in compliance with the rules and regulations of the Stock Exchange of Thailand. The information includes shareholding structure, major shareholders, shareholding of directors and top executives, the Group’s vision and mission, performance by business units, and top corporate risks, etc. In addition, disclosure related to directors includes information on their profiles, meeting attendances, training, shareholding and remuneration.
- Directors and executives are required to file reports on their own or any related person’s interests regarding the management of the Company or any of its subsidiaries in accordance with the stipulated rules and regulations. Since these may cause conflicts of interest and can lead to the siphoning of assets, it is imperative for these to be disclosed in full. These reports ensure that all directors and executives adhere to the fiduciary duties they are bound to. No director or executive shall have any interest whatsoever, both directly and indirectly, to matters under their decision. The Company Secretary acknowledges, signs and submits these reports to the Chairman of the Board and the Chairman of the Audit Committee within 7 days of their submission in compliance with Section 89/16 of Securities and Exchange Act, B.E. 2535 (As amended).
- Directors and top executives are also stipulated to file with the SEC for every purchase, sale and transfer of Company’s shares in compliance with Notification of the Office of the Securities and Exchange Commission No. Sor. Jor. 38/2561.
 - In addition, summaries of the shareholding of all directors and top executives are reported quarterly to the Board of Directors meeting.

Changes in company shareholding of the directors and top executives are as follows:

No.	Name	Position	Shareholding amount as of 31 December 2020	Change as of Shareholding (decrease) in 2021	Shareholding amount as of 31 December 2021	Shareholding proportion in the Company (%)
1.	Mr. Chainoi Puankosoom Spouse/ Minor child	Chairman, Independent Director	-	5,000	5,000	0.0003
2.	Mr. Koh Ban Heng Spouse/ Minor child	Vice Chairman, Independent Director Member of Nomination and Remuneration committee ^{1/} Independent Director	-	-	-	-
3.	Mr. Phirasilp Subhapholsiri Spouse/ Minor child	Independent Director Chairman of the Audit Committee and Chairman of the Corporate Governance Committee	-	-	-	-
4.	Mr. Nopporn Thepsithar Spouse/ Minor child	Independent Director, Chairman of the Nomination and Remuneration Committee, Member of Audit Committee	-	-	-	-
5.	Mr. Niphon Suthimai Spouse/ Minor child	Independent Director, Member of Audit Committee ^{2/} Member of Corporate Governance Committee, Member of Nomination and Remuneration committee ^{1/}	-	-	-	-
6.	Mr. Jean-Marie Verbrugghe Spouse/ Minor child	Director	-	-	-	-
7.	Mr. Frederic Gardes Spouse/ Minor child	Director	-	-	-	-
8.	Ms. Laksana Supsakorn Spouse/ Minor child	Director	13,860,000	-	13,860,000	0.878
9.	Mr. Somchit Serththin Spouse/ Minor child	Director Member of Nomination and Remuneration Committee	31,900,000	(900,000)	31,000,000	2.021
10.	Mr. Jacques Pastor Spouse/ Minor child	Executive Director Member of Nomination and Remuneration Committee	1,650,000	(450,000)	1,200,000	0.105
11.	Mr. Chaiwat Srivalwat Spouse/ Minor child	Executive Director, Member of the Corporate Governance Committee and Chief Executive Office	3,000,000	-	3,000,000	0.190

No.	Name	Position	Shareholding amount as of 31 December 2020	Change as of Shareholding (decrease) in 2021	Shareholding amount as of 31 December 2021	Shareholding proportion in the Company (%)
12.	Mr. Sitarb Supsakorn	Executive Director	17,250,000	-	17,250,000	1.093
	Spouse/ Minor child		-	-	-	-
13.	Mr. Hugues de Champs	Executive Director	400,000	5,000	405,000	0.026
	Spouse/ Minor child		-	-	-	-
14.	Mr. Jacques Marechal	Executive Director, Member of the Corporate Governance Committee	1,200,000	-	1,200,000	0.076
	Spouse/ Minor child		-	-	-	-
15.	Mrs. Kanya Ruengprateepsang	Chief Financial Officer	-	120,000	120,000	0.008
	Spouse/ Minor child		-	-	-	-
16.	Mr. Thierry Defrene	Chief Operating Officer - Logistics and Procurement	40,000	10,000	50,000	0.003
	Spouse/ Minor child		-	-	-	-
17.	Mr. Christophe Bernard Voy	Chief Operating Officer - International Business	-	-	-	-
	Spouse/ Minor child		-	-	-	-
18.	Mr. Soranard Nantamontry	Chief Operating Officer - Thailand Business	428,500	-	428,500	0.027
	Spouse/ Minor child		-	-	-	-
19.	Mrs. Udornporn Punpatch	Chief People Officer	1,140,900	(5,000)	1,135,900	0.072
	Spouse/ Minor child		23,100	-	23,100	0.0015

- 1/ The Board of Directors meeting No. 1/2021 held on 14th January 2021 resolved to appoint Mr. Koh Ban Heng as a member of the Nomination and Remuneration committee, replacing Mr. Niphon Suthimai. This appointment became effective on 14th January 2021.
- 2/ The Board of Directors meeting No. 1/2021 held on 14th January 2021 resolved to appoint Mr. Niphon Suthimai as a member of the Audit committee in replacement of Mr. Parnchalerm Sutatam, with effect from 14th January 2021.

INVESTOR RELATIONS



Information related to investors is posted on the Company's website at http://www.tipcoasphalt.com/investor_news.aspx. Disclosure of information adheres to Corporate Governance and Best Investor Relations Awards guidelines. The Company's score on Best IR award in 2021 was 88.86% which improved from 84.52% in 2020. In 2021, the Company virtually participated in the following information exchange activities with investors, analysts, and fund managers:

Type of Meeting	No. of Events
Analyst Meeting	4
Opportunity Day by the Stock Exchange of Thailand	4
One-on-One Meeting	3
Domestic Roadshow	2
International Roadshow	1
Thailand Focus seminar by the Stock Exchange of Thailand	1

The Company's news and press releases are publicly updated on <https://www.tipcoasphalt.com/investor-relations/shareholder-information/press-release-earning-release%e2%80%8b/> in a timely manner.

- Updated regulations and investor feedback are routinely reported to top management and the Corporate Governance Committee for further development.
- Information requests, comments and inquiries related to investor relations should be made by contacting at Mr.Thanapol Laosiripong at tel. +66 2273 6642, fax. +66 2271 3363, or by email at investors@tipcoasphalt.com.

6.2 Code of Ethics

The present prosperity, success, and stability of the Tipco Asphalt Group are the result of doing business according to its core values – the ideals that have been upheld and put into practice by the Board of Directors, management, and staff at all levels. This fosters synergy in all our employees, and is one of the building blocks of the Tipco Asphalt Group’s corporate governance which engenders confidence in shareholders, investors and all stakeholders. All Tipco Asphalt Group employees are expected to understand and embody our core values (as set out below) in conducting the Group’s business:

Execute with TEAMWORK

- Apply individual strength to achieve team objectives
- Understand your task well
- Trust others
- Execute with speed, accuracy and competency
- Take ownership
- Share success and rewards
- Celebrate wins no matter how big or small

Act with INTEGRITY

- Within laws and ethical standards
- Zero tolerance to misconduct and unlawful activities
- Be a responsible social and corporate citizen

Proceed with PRUDENCE

- Take risk with care and anticipate the consequences
- Do thorough analysis using reliable data, intuition, experience and technology before making decisions

Show our COMMITMENT

- Put organization goals first
- Dedicate to excellence
- Respect stakeholders’ needs
- Put effort and energy to make all mission possible

Keep an OPEN-MIND

- Be approachable
- Not afraid of change
- Embrace feedback and listen attentively
- Cultivate diverse ideas

The full Code of Ethics is disclosed as Attachment 5.

6.3 Milestones of Policy, Guidelines, and Corporate Governance of This Past Year

6.3.1 Milestones of Policy, Guideline, and Corporate Governance System

The Company fully recognizes the importance of corporate governance, which is a crucial part of the pursuit of sustainable growth. To this end, reviews on policy, guidelines, and corporate governance systems, were conducted on a continued basis with results presented to both the Corporate Governance committee and the Board of Directors. In 2021, the Board of Directors reviewed the Board charter and set out the shared duties and responsibilities of the Board of Directors and the management duties and responsibilities that the Board of Directors should delegate to Management with the following details:

Shared Duties and Responsibilities of the Board of Directors and Management:

1. Formulate and review policies and strategies, plans and targets.
2. Ensure a robust system for risk management and internal control.
3. Clearly define management's responsibilities.
4. Oversee appropriate policies and plans for resource allocation, including HR, IT, and budgeting.
5. Monitor and evaluate financial and non-financial corporate performance.
6. Ensure the integrity of financial and non-financial information disclosures.

Duties and Responsibilities that the Board of Directors should delegate to the Management

- Engaging in activities which under normal circumstances do not fall under the Board's remit, including day-to-day management and decisions (such as procurement and staffing), and ongoing monitoring to ensure operations comply with the company's policies, strategies, plans, and applicable laws and standards.

6.3.2 Compliance with Corporate Governance Code (CG Code)

The Company acts in accordance with the 2017 Corporate Governance Code for Listed Companies (CG Code) issued by the Securities and Exchange Commission. Following the Corporate Governance Committee's recommendation, the Board of Directors reviewed the application of the CG Code's Principles and Sub-Principles including reasons for not following certain Sub-Principles, and recorded these observations as board resolutions in 2021. The sub-principles which the Company has chosen not to follow are explained as follows:

Sub-Principle	Explain
3.1.2 The Board should determine the proper number of directors to function effectively. It must comprise at least 5 directors and should not be more than 12 directors, depending on the company's size, type, and complexity of the business	Given the Company's many subsidiaries across diverse countries, the Company needs several directors with knowledge and expertise in different areas. The Board of Directors comprised 14 members who have diverse knowledge, experience, and expertise, to ensure the fulfilment of the Group's Mission and Vision.

Sub-Principle	Explain
<p>3.2.5 The Board should establish the policy that the tenure of an independent director should not exceed a cumulative term of nine years from the first day of service. Upon completing nine years, an independent director may continue to serve on the board, subject to the Board's rigorous review of his/her continued independence.</p>	<p>The Company's Board of Directors trusts that we have carefully selected and nominated our independent directors. Throughout their tenures, they remain adept, ethical and continue to contribute satisfactorily to the sustainable growth and development of the Company. It is obvious they fully understand their roles and responsibilities to both core and minority shareholders alike. This is reflected in our average CG score of above 90% for the past four years, and further reflected in the scores received by independent directors in their re-election at the last annual general shareholders' meetings. The re-election number stands at 98% on average.</p>
<p>3.7.3 The company should appoint an external consultant to assist in setting guidelines and providing recommendations for a Board assessment at least once every three years. This information should be disclosed in the annual report.</p>	<p>The Company has conducted the Board of Directors assessment using the forms designed by the Stock Exchange of Thailand. The assessment was conducted on both collective and individual bases, and was deemed adequate.</p>
<p>3.9.2. The number of Board meetings should be appropriate to the obligations and responsibilities of the board and nature of the business, but the Board should meet at least six times per financial year. If the Board meetings are not held monthly, the Board should receive a report on the company's performance for the months in which the board does not hold a meeting, so that it can monitor management and company performance continuously and promptly."</p>	<p>In 2021, there were 5 Board meetings which covered all topics under the Act of Public Limited Companies. During each of the meetings, management reports on quarterly performance and on the progress of key activities of the Company to the Board of Directors. In addition, management may report any urgent matters to the Board as need be. Hence, the Board of Directors can monitor management and company performance continuously and promptly.</p>
<p>8.2.6 All directors and relevant executives should attend the meeting to answer questions from shareholders on company-related matters.</p>	<p>In the midst of the Covid-19 pandemic, it was unlikely for all foreign directors to attend the AGM. Although all directors did not participate in the AGM, all sub-committees' chairmen attended the AGM to answer questions from shareholders.</p>

6.3.3 Other practices

The Board of Directors recognizes the importance of corporate governance in the Company's sustainable development, creating shareholder value, and securing trust from all stakeholders, including shareholders, employees, customers, business partners, competitors, and creditors.

We are pleased to announce that the Company was rated Excellent or 5 Stars, which is the highest level of Corporate Governance Report of Thai Listed Companies 2021 (CGR), by the Thai Institute of Directors Association (IOD) for 4 consecutive years. In addition, the Company received 98 points out of a total possible 100 points on the Annual General Meeting Checklist from the Thai Investors Association. Furthermore, the Company has been invited to participate in assessing ASEAN Corporate Governance Scorecard (ACGS) 2021 as 1 out of 100 companies in Thailand to reflect good corporate governance in the region. ACGS is organized by SEC and the Thai Institute of Directors (IOD) in conjunction with the ASEAN Capital market Forum (ACMF) and the Asian Development Bank.



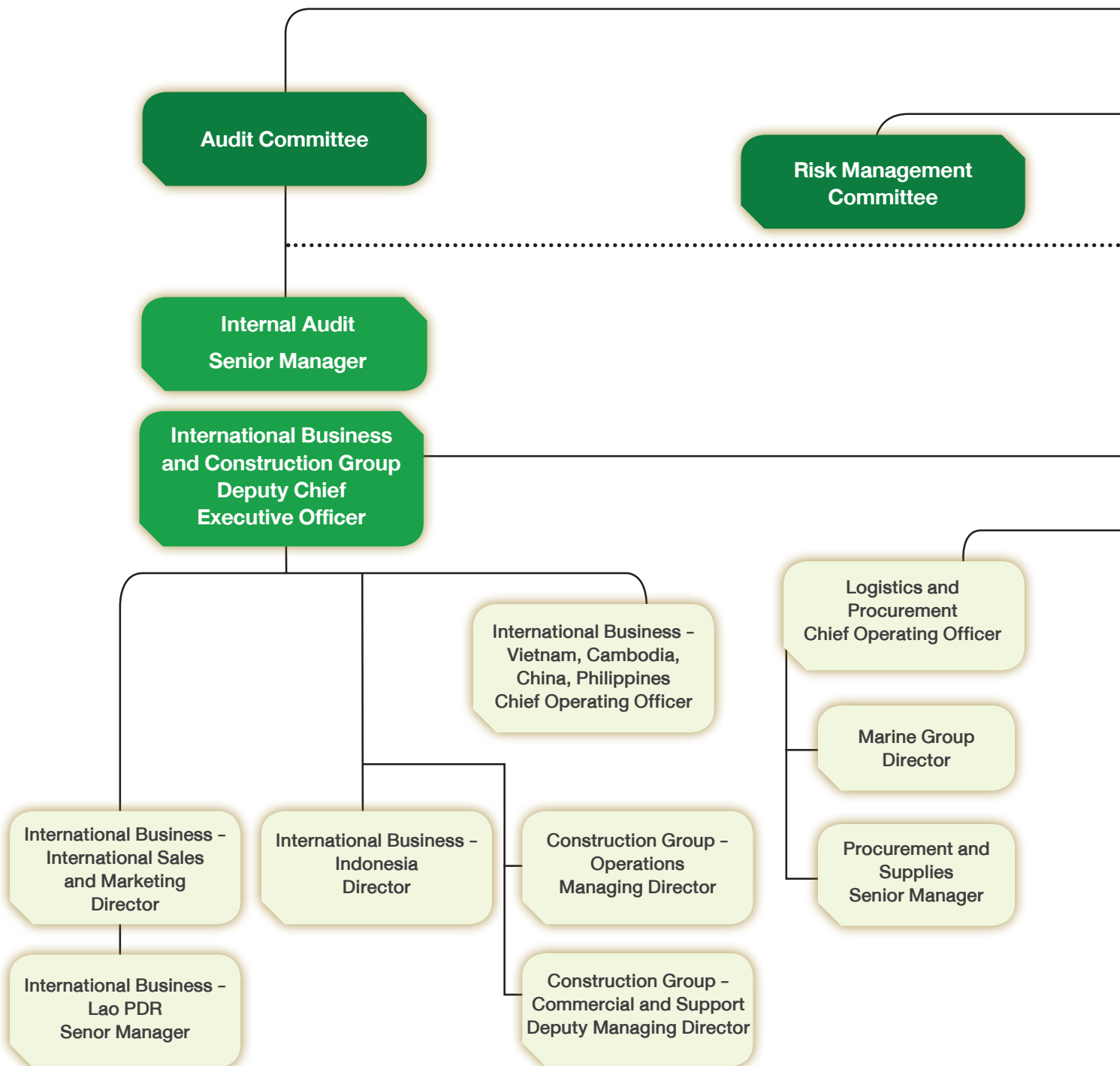
Finally, we are pleased to announce that we have been selected as one of the listed companies included in the Thailand Sustainability Investment Index (THSI Index) for 4 consecutive years. The Company also received the Sustainability Disclosure Award in 2021 for 3 consecutive years from the ThaiPat Institute.

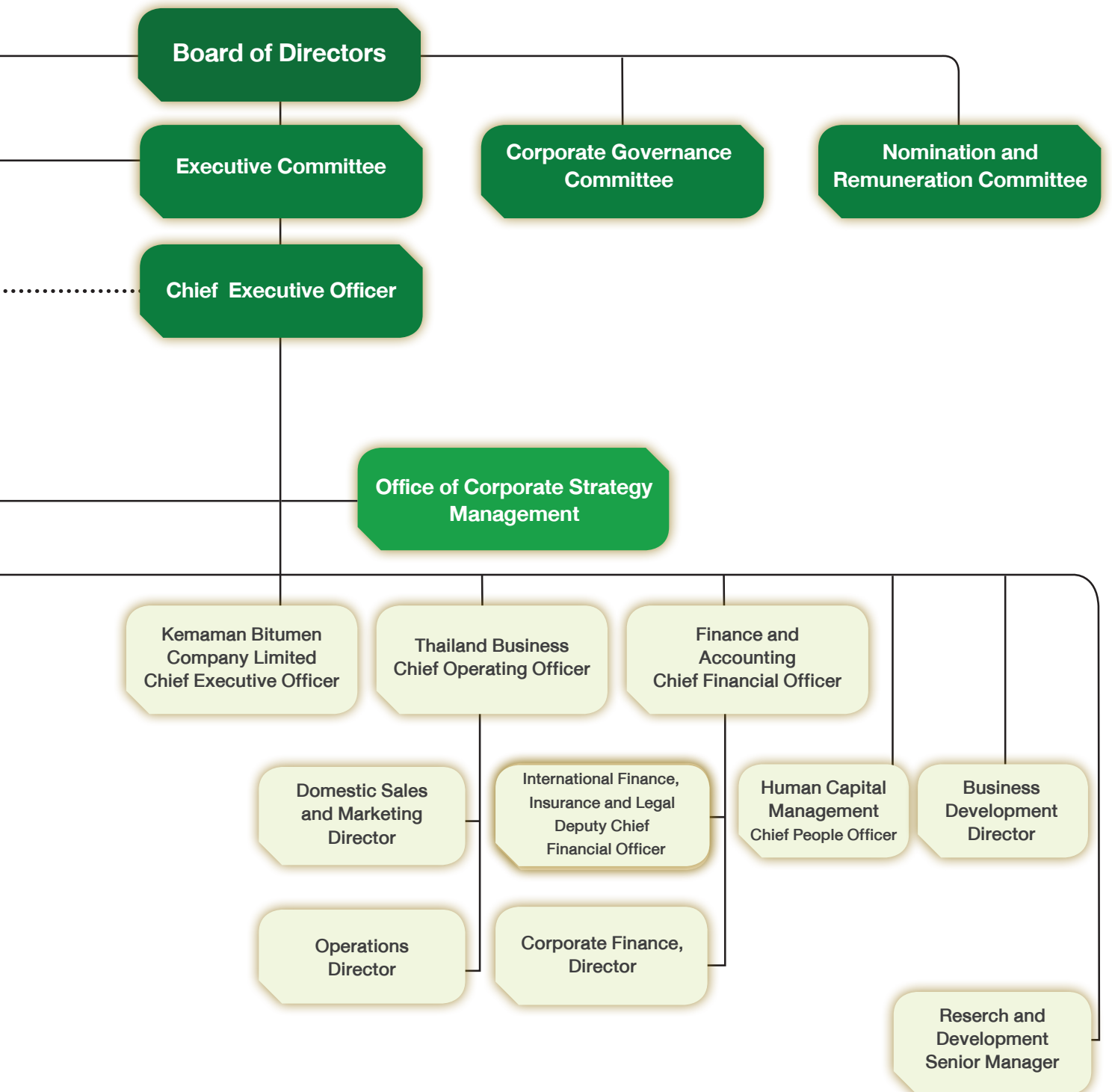


7. Corporate governance structure and key information about the Board, Sub-Committees, Management, Employees, and Others

7.1 Corporate Governance Structure

The Board of Directors and Management act in the best interests of the Company and its shareholders under a clear, balanced, and accountable management structure. The Board monitors and ensures that Management implements its policies, plans and strategies, and that there is clear distinction of roles and responsibilities between the Board and Management. The Board appoints sub-committees to consider significant matters, which include the Audit Committee, the Executive Committee, the Nomination and Remuneration Committee, and the Corporate Governance Committee.





7.2 The Board of Directors



MR. CHAINOI PUANKOSOOM
Chairman / Independent Director
Starting date of Directorship 13 August 2015



MR. KOH BAN HENG
Vice Chairman / Independent Director
Starting date of Directorship 1 July 2011



MS. LAKSANA SUPSAKORN
Director
Starting date of Directorship 15 August 2013



MR. PHIRASILP SUBHAPHOLSIRI
Independent Director
Starting date of Directorship 14 May 2013



MR. NOPPORN THEPSITHAR
Independent Director
Starting date of Directorship 27 April 2012



MR. JEAN - MARIE VERBRUGGHE
Director
Starting date of Directorship 7 April 2020



MR. NIPHON SUTHIMAI
Independent Director
Starting date of Directorship 16 February 2006



MR. HUGUES DE CHAMPS

Executive Director

Starting date of Directorship 17 February 2020



MR. SOMCHIT SERTTHIN

Director

Starting date of Directorship 29 April 1994



MR. FREDERIC GARDES

Director

Starting date of Directorship 11 May 2018



MR. JACQUES PASTOR

Executive Director

Starting date of Directorship 1 August 2000



MR. CHAIWAT SRIVALWAT

Executive Director

Starting date of Directorship 13 February 2002



MR. JACQUES MARECHAL

Executive Director

Starting date of Directorship 27 April 2012



MR. SITILARB SUPSAKORN

Executive Director

Starting date of Directorship 25 April 2001

7.2.1 The Board Composition

- The Board consists of 14 directors, with one female member and five executive directors.
- As of 31st December 2021, there are 5 independent directors, accounting for more than the one-third required by law.
- The Chairman cannot be the same person as the Chief Executive Officer for the sake of clear-cut responsibilities and duties.
- Board diversity is prioritized, with its members equipped with the necessary skills to match various business strategies, are identified through director qualifications. There is also a wide variety of education and experience without discrimination across members (detailed in Attachment 1).

Board Skill Matrix

No.	Name	Strategic planning	Industry knowledge	Accounting and finance	International marketing	Organization and human resources management	Risk management
1	Mr. Chainoi Puankosoom	✓	✓	✓		✓	✓
2	Mr. Koh ban Heng	✓	✓	✓	✓		✓
3	Mr. Phirasilp Subhapholsiri	✓	✓	✓	✓	✓	✓
4	Mr. Nopporn Thepsithar	✓	✓			✓	✓
5	Mr. Niphon Suthimai	✓	✓	✓		✓	✓
6	Mr. Frederic Gardes	✓	✓				✓
7	Ms. Laksana Supsakorn		✓	✓			
8	Mr. Jean-Marie Verbrugghe	✓	✓	✓		✓	✓
9	Mr. Somchit Sertthin	✓	✓	✓	✓		✓
10	Mr. Sitilarb Subsakorn		✓	✓			
11	Mr. Jacques Pastor	✓	✓		✓		
12	Mr. Chaiwat Srivalwat	✓	✓		✓	✓	✓
13	Mr. Hugues de Champs	✓	✓		✓		
14	Mr. Jacques Marechal		✓	✓			✓

7.2.2 The Board Information

The Board of Directors of Tipco Asphalt Plc. is composed of 14 members as follows:

Name	Position
Mr. Chainoi Puankosoom	Chairman/ Independent Director
Mr. Koh Ban Heng	Vice Chairman/Independent Director Member of Nomination and Remuneration Committee
Mr. Phirasilp Subhapholsiri	Independent Director Chairman of Audit Committee Chairman of Corporate Governance Committee
Mr. Nopporn Thepsithar	Independent Director Chairman of Nomination and Remuneration Committee Member of Audit Committee
Mr. Niphon Suthimai	Independent Director Member of Audit Committee Member of Corporate Governance Committee
Mr. Jean-Marie Verbrugghe	Director
Mr. Frederic Gardes	Director
Ms. Laksana Supsakorn	Director
Mr. Somchit Serththin	Director Member of Nomination and Remuneration Committee
Mr. Jacques Pastor	Executive Director Member of Nomination and Remuneration Committee
Mr. Chaiwat Srivalwat	Chief Executive Officer Executive Director Member of Corporate Governance Committee
Mr. Sitilarb Supsakorn	Executive Director
Mr. Hugues de Champs	Executive Director
Mr. Jacques Marechal	Executive Director Member of Corporate Governance Committee

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

DUTIES AND RESPONSIBILITY OF THE BOARD OF DIRECTORS

The Board of Directors of Tipco Asphalt Public Company Limited (“Company”) has a commitment to its fiduciary duties and responsibilities, and shall ensure the Company is managed and operated in the best interests of shareholders. To adhere to these fiduciary duties, each director commits to the following key duties:

1. To perform duties with due care (Duty of Care);
2. To perform their duties with loyalty to protect the best interests of the Company and shareholders (Duty of Loyalty);
3. To comply with laws and regulations, the Company’s objectives, the Company’s articles of association, and the resolutions of the Board of Directors and shareholders’ meetings (Duty of Obedience); and
4. To disclose information to the shareholders in an accurate, complete, transparent and timely manner (Duty of Disclosure).

The basic responsibility of the Directors is to exercise their business judgment in the best interest of the Company’s shareholders, while bolstering the Group’s sustainable growth. The Board shall ensure that each director performs his/her duty in accordance with all relevant laws and regulations. In furtherance of its responsibilities, the Board of Directors shall:

1. Define, evaluate, approve and review, on a regular basis, the Company’s vision, mission, corporate values, business policies, long-term plans and strategies.
2. Review, evaluate and approve the Company’s budget and forecast, including resource allocation and capital expenditures;
3. Regularly review the Company’s financial and operating results and adjust the Company’s business strategies accordingly;
4. Review, evaluate and approve the overall corporate organizational structure, the assignment of senior management responsibilities and succession plans;
5. Review, evaluate and approve compensation packages pertaining to senior management of the Company;
6. Adopt, implement and monitor compliance with the Company’s Code of Ethics;
7. Review and assess the effectiveness of the Company’s policies and practices with respect to internal control, risk assessment and risk management;
8. Periodically review the Company’s policies and progress relating to social responsibilities;
9. Conduct an annual self- evaluation, the results of which will be discussed with the full Board yearly to identify areas requiring further improvement;
10. Periodically review the performance of the Chief Executive Officer and approve a compensation package as deemed appropriate by the Board;
11. Review, at least annually:
 - (i) The status of major litigation,
 - (ii) Compliance with significant regulatory requirements affecting the Company; and
 - (iii) corporate governance matters; and
12. Perform any other duties in accordance with the Board’s and shareholders’ resolutions.

Matters involving shared responsibility of the Board and Management:

1. Formulate and review policies, strategies, plans and targets.
2. Ensure a robust system for risk management and internal control.
3. Clearly define Management's responsibilities.
4. Oversee appropriate policies and plans for resource allocation, including HR, IT, and budgeting.
5. Monitor and evaluate financial and non-financial corporate performance.
6. Ensure the integrity of financial and non-financial information disclosures.

Matters that the board should delegate or not get involved with:

Engaging in activities which under normal circumstances do not fall under the Board's remit, including day-to-day management and decisions (such as procurement and staffing), and ongoing monitoring to ensure that conduct and operations are in compliance with the company's policies, strategies, plans, and applicable laws and standards.

Duties and Responsibilities of the Chairman of the Board

1. To summon the meetings of the Board of Directors according to the pre-determined schedules and others as necessary;
2. To preside over the Board of Directors meetings;
3. To promote corporate governance standards of the Board of Directors;
4. To preside over Shareholders' meetings, and conduct the meetings following the sequences of the agenda and in compliance with the Company's Articles of Association; and
5. To perform the duties specified by the laws and regulations.

The charter of the Board of Directors is disclosed as Attachment 5.

7.3 Sub-Committees

The Board has appointed Sub-committees to study and review specific matters. At present, the Company has four Sub-committees appointed by the Board of Directors: the Executive Committee, the Audit Committee, the Nomination and Remuneration Committee, and the Corporate Governance Committee;

1. EXECUTIVE COMMITTEE

The Executive Committee's responsibilities are established by the Board of Directors. The Chairman of the Executive Committee has the highest authority to set operational policies related to the Company, while the Chief Executive Officer has the highest authority for their implementation.

SCOPE OF AUTHORITY OF THE EXECUTIVE COMMITTEE

The Executive Committee, pursuant to the resolutions of the Board of Directors of the Company, is responsible for the following:

1. Proposing agendas for the meetings of the Board of Directors and counseling the Board of Directors on major decisions;
2. Establishing the policies and operating procedures of the Company; and

3. Managing, making decisions and directing the business and affairs of the Company, except as otherwise specified. All actions by the Executive Committee require the approval of the Chairman and Vice Chairman of the EC (present or represented by proxy) as defined ("Majority of the Members"), and all decisions made by the Executive Committee pursuant to these Rules and Regulations (except for decisions which by the express terms of the Articles of Association or the PLCA require the approval of the Board of Directors) shall be binding on the Company and its management.

The Executive Committee may, from time to time, with the approval from the majority of its members, submit a written request to the Board of Directors for the Board to ratify, confirm or authorize any matters as requested or directed by the Executive Committee. Nevertheless, Executive Committee authority is subject to the prevailing chart of authority at the time.

Matters which are delegated to and may be decided by the Executive Committee are:

1. Award of any contract to vendors or suppliers not exceeding an amount to be fixed by the Company Board;
2. Employment, promotion and dismissal of top management personnel;
3. Preparation and submission for approval by the Board of Directors of any proposal to merge the Company with another economic organization or to form a joint venture company or partnership between the Company and any organization;
4. Policies on salaries, wages of officers and employees of the Company, benefits and allowances;
5. Marketing and Sales policies;
6. Preparation and submission for approval by the Board of Directors of annual profit and loss budget, annual cash flow projections, strategic plans, business plans and investment and disposal plans of the Company and the subsidiaries;
7. Entry by the Company or any subsidiary into any transaction which is covered by a profit and loss budget, strategic plan, business plan or financial policy approved by the Board of Directors;
8. Entry by the Company or any subsidiary into any transaction which is covered by the investment and asset disposal plan approved by shareholders;
9. The appointment and removal of directors of any subsidiary;
10. Submission and participation in bids, signing contracts, correspondences or documents binding the Company;
11. Representing the Company and acting on its behalf with third parties, public or private persons, ministries, administrations, and local communities;
12. Granting sub delegations to beneficiaries with the necessary means, skills and authority, as the Executive Committee deems timely, for a duration it shall determine, concerning any or part of the present Rules and Regulations; and
13. Carrying out all acts, which are necessary for the execution of the present rules and regulations, with the exception of the following cases where the Board of Director's consideration and approval are required;
 - Entry into any transaction which is subject to approval by the Board of Directors approval under the chart of authority
 - Entry into any connected transaction and acquisition and disposition of asset transaction as stipulated under the rule and guidelines mandated by the Securities and Exchange Commission, Thailand and Stock Exchange of Thailand that requires by law to be considered and approved by the Board of Directors or shareholders.

The rules and regulations of the Executive Committee are disclosed as Attachment 5.

2. AUDIT COMMITTEE

The Company has a process for inspecting and controlling the business through the appointment of three Independent Directors.

REQUIREMENTS FOR APPOINTMENT OF MEMBERS OF THE AUDIT COMMITTEE

1. The Audit Committee shall be appointed by the Board of Directors, consisting of at least three independent directors. At least one member should have an understanding of and expertise in accounting matters. The Audit Committee shall select one member to be Chairman of the Audit Committee.
2. The term of an Audit Committee member is three years. Members whose term of office expires may be re-appointed.
3. The Audit Committee enjoys independence in performing its duties. It reports directly to the Board of Directors.
4. The tenure of an Audit Committee member will cease upon said member's death, resignation, dismissal or retirement by rotation.
5. There must be at least four Audit Committee meetings each year, the results of which are to be reported to the Board of Directors.

TERMS OF OFFICE OF THE AUDIT COMMITTEE

The Audit Committee directly reports to the Board of Directors. Each Audit Committee member serves a three-year term. New members will be appointed and/or old members are re-appointed by the Board of Directors at the end of the term.

SCOPE OF AUTHORITY OF THE AUDIT COMMITTEE

The role of the Audit Committee, as assigned by the Company Board of Directors, is as follows:

1. Review the reporting of the Company's financial statements for their accuracy and adequacy;
2. Review the suitability and effectiveness of the Company's internal control system, internal audit function and the independence of the Internal Audit Department, while providing concurrence to the appointments, transfers, and terminations of the Internal Audit Manager;
3. Review the Company's compliance to any rules and regulations including those on securities, regulations of the SET and any other regulations relevant to the Company's business;
4. Propose to the Company's Board of Directors on the selection or termination of the external auditor. The Audit Committee shall also review the proposed fees of the external auditor when proposing its selected external auditors to the Company's Board of Directors. The Audit Committee shall also participate in a meeting with the external auditor at least once a year without the presence of the Company's Management;
5. Consider the Company's business transactions with related parties, or any transaction that may lead to potential conflicts of interest, in compliance with the relevant rules and regulations of the SET to ensure their rationality and maximum benefit to the Company;
6. Issue a report, to be signed by the Chairman of the Audit Committee, and disclosed in the Company's Annual Report, which shall contain comments on at least the following areas:
 - 6.1 Accuracy, adequacy and credibility of the Company's financial statements.
 - 6.2 Adequacy of the Company's internal control system.

- 6.3 Compliance with any regulations on securities, the regulations of the SET and other regulations relevant to the Company's business.
- 6.4 Appropriateness of the external auditor.
- 6.5 Transactions of possible conflicts of interest.
- 6.6 Meetings of the Audit Committee and contributions of members.
- 6.7 Overall comments from performing in accordance with this Charter.
- 6.8 Other transactions that shareholders or other investors should be aware of in accordance with the roles and responsibilities assigned by the Company Board of Directors.

The Audit Committee's charter is disclosed as Attachment 5.

3. NOMINATION AND REMUNERATION COMMITTEE

The Nomination and Remuneration Committee (N&R committee) consists of four Directors, two of which are Independent Directors. One of the Independent Directors is appointed as the Chairman of the Nomination and Remuneration Committee.

SCOPE OF AUTHORITY OF THE NOMINATION AND REMUNERATION COMMITTEE

1. To screen and select the appropriate persons as members of the Board of Directors, and to propose the selected individuals to the Board of Directors, who then submit the proposal to the Shareholders' Meeting for approval;
2. To screen and select the appropriate qualified persons to be nominated as Chief Executive Officer, and then propose the nominee to the Board of Directors for approval;
3. To propose remuneration packages for the Company's Directors to the Board of Directors and sub-committees, and to further propose the same packages to the shareholders meeting for approval;
4. To propose the remuneration packages for the Chief Executive Officer and Executive Directors to the Board of Directors for approval; and
5. To engage in any other duties as assigned by the Board of Directors.

The N&R committee is in charge of nominating appropriate persons as members of the Board of Directors in accordance with the Group's policy on Director Qualifications and Nomination. In addition, the N&R committee is responsible for suggesting competitive remuneration packages for the Board of Directors, sub committees and Executive Directors, using the self-assessments of the Board of Directors, Sub-committees, and Chief Executive Officer, as key reference points. Finally, the N&R committee is in charge of proposing a succession plan for the positions of Chief Executive Officer and other senior executives.

The charter of the Nomination and Remuneration Committee is disclosed as Attachment 5.

4. CORPORATE GOVERNANCE COMMITTEE

The Board of Directors appoints the Corporate Governance Committee to improve the Company's corporate governance practices and to make sure practices comply with the 'Principles of Good Corporate Governance' for listed companies. The Committee consists of four members (two of which are Independent Directors, while the other two are Executive Directors).

TERMS OF OFFICE OF THE CORPORATE GOVERNANCE COMMITTEE

1. The term of each member is three years. Members whose term of office expires may be re-appointed;
2. Corporate Governance Committee members shall vacate office upon expiration of their term of office, death, resignation, and removal from directorship; and
3. In the event where positions within the Committee become vacant for reasons other than the expiration of a term of office, and where the number of active members becomes less than three, the Board of Directors shall appoint persons who are fully qualified as replacements within three months. Replacing members shall hold office for the remaining term of office of the members whom they replace.

ROLES AND RESPONSIBILITIES OF THE CORPORATE GOVERNANCE COMMITTEE

1. Propose corporate governance (CG) principles, policies and guidelines to the Board;
2. Advise the Board on CG matters;
3. Ensure that the duties and responsibilities of directors and management conform to CG principles and policies; and
4. Revise guidelines of the Company's CG to comply with the CG guidelines recommended by the Securities and Exchange Commission of Thailand ("SEC").

The charter of the Corporate Governance Committee is disclosed as Attachment 5.

7.3.2 List of Sub-Committee

1. EXECUTIVE COMMITTEE

- | | |
|------------------------------------|---------------------------------------|
| 1. Mr. Chaiwat Srivalwat | Chairman / Executive Director |
| 2. Mr. Jacques Pastor | Vice Chairman / Executive Director |
| 3. Mr. Sitilarb Supsakorn | Member / Executive Director |
| 4. Mr. Hugues de Champs | Member / Executive Director |
| 5. Mrs. Kanya Ruengprateepsang | Member / Executive Officer |
| 6. Mr. Christophe Bernard Voy | Member / Executive Officer |
| 7. Mr. Thierry Alain Simon Defrene | Member / Executive Officer |
| 8. Mr. Soranard Nantamonty | Member / Executive Officer |
| 9. Mr. Jacques Marechal | Member/Secretary / Executive Director |

2. AUDIT COMMITTEE

- | | |
|--------------------------------|---------------------------------|
| 1. Mr. Phirasilp Subhapholsiri | Chairman / Independent Director |
| 2. Mr. Nopporn Thepsithar | Member / Independent Director |
| 3. Mr. Niphon Suthimai | Member / Independent Director |
| Mr. Joseph Soosay | Secretary of Audit Committee |

All members of the Audit Committee have the adequate expertise in accounting and finance.

3. NOMINATION AND REMUNERATION COMMITTEE

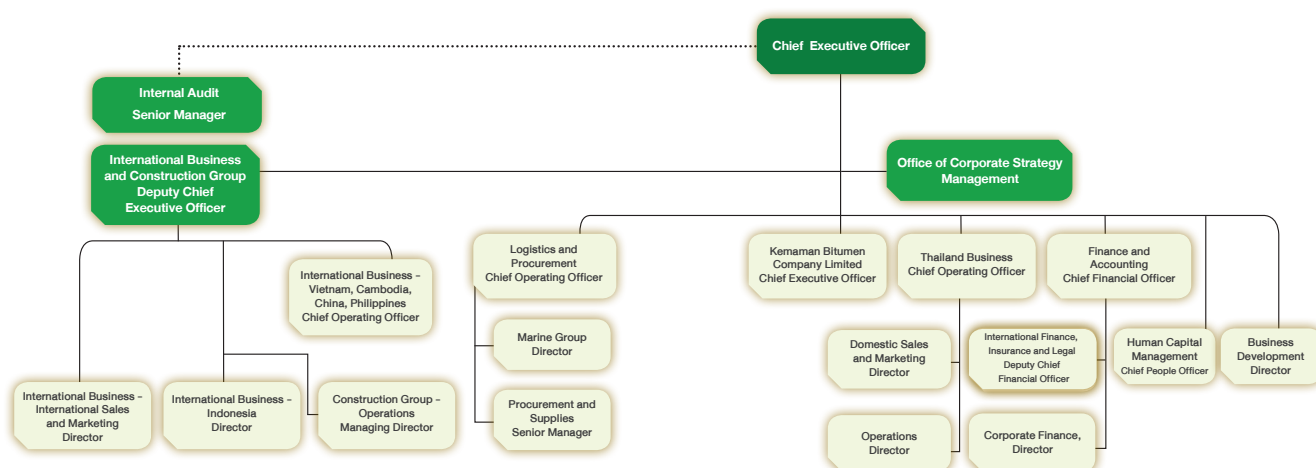
- | | |
|---------------------------|---------------------------------|
| 1. Mr. Nopporn Thepsithar | Chairman / Independent Director |
| 2. Mr. Koh Ban Heng | Member / Independent Director |

- | | |
|--------------------------|-----------------------------|
| 3. Mr. Jacques Pastor | Member / Executive Director |
| 4. Mr. Somchit Serththin | Member / Director |

4. CORPORATE GOVERNANCE COMMITTEE

- | | |
|--------------------------------|---------------------------------|
| 1. Mr. Phirasilp Subhapholsiri | Chairman / Independent Director |
| 2. Mr. Niphon Suthimai | Member / Independent Director |
| 3. Mr. Chaiwat Srivalwat | Member / Executive Director |
| 4. Mr. Jacques Marechal | Member / Executive Director |

7.4 Executive Management



7.4.1 Names and Positions of Executives

The Board has set the roles and duties of Management in the day-to-day business activities in line with the company's policies, chart of authority and Board resolutions. In 2021, there were 15 top executives as follows:

- | | |
|------------------------------------|---|
| 1. Mr. Chaiwat Srivalwat | Chief Executive Officer |
| 2. Mr. Jacques Pastor | Executive Director |
| 3. Mr. Sitilarb Supsakorn | Executive Director |
| 4. Mr. Hugues de Champs | Deputy Chief Executive Officer – International Business |
| 5. Mrs. Kanya Ruengprateepsang | Chief Financial Officer |
| 6. Mr. Thierry Alain Simon Defrene | Chief Operating Officer – Logistics and Procurement |
| 7. Mr. Christophe Bernard Voy | Chief Operating Officer – International Business |
| 8. Mr. Soranard Nantamontry | Chief Operating Officer – Thailand Business |
| 9. Mrs. Udomporn Punpatch | Chief People Officer |
| 10. Mr. Jacques Marechal | Deputy Chief Financial Officer – International Finance, insurance and Legal |
| 11. Ms. Auchcha Rattrakultrip | Director – Corporate Finance |
| 12. Mr. Martin Brzuska | Director – Marine Group |
| 13. Mr. Chanchai Lohapratarn | Director – Domestic Sales and Marketing |
| 14. Mr. Suphat Pipitawan | Director – Operations |
| 15. Mrs. Punsiri Suttienkul | Director – Corporate Branding and Corporate Social responsibility |

No.1, 4-9 of whom are regarded as executives under SEC's definition (As of December 2021):

Directors and top executives assigned to other companies

The appointment of directors and top executives of subsidiaries and associated companies to oversee and manage their operations is a key governance mechanism that ensures subsidiaries and associated companies comply with policies, goals, company vision, medium-term business plans, and strategic growth plans efficiently. As such, the Board of Directors of Tipco Asphalt Public Company Limited (the Company) formulated a policy for the appointment of directors and executives to subsidiaries and associated companies.

The Board of Directors of the Company has assigned the Executive Committee to appoint and transfer Company representatives to the Board or executive positions in subsidiaries/associated companies in accordance with shareholding proportion.

The nominated person shall have the necessary qualifications, a sound knowledge of ethics, a sense of responsibility, and leadership qualities as deemed appropriate.

Please consult the list of Board of Directors members and top executive directorship in subsidiaries, joint ventures associated companies or other related companies in Attachment 2

7.4.2 Remuneration of Executive Directors and Executives

REMUNERATION FOR THE CHIEF EXECUTIVE OFFICER AND EXECUTIVE DIRECTORS

The N&R committee assesses the performance of the Chief Executive Officer and Executive Directors and proposes their remuneration packages for approval by the Board of Directors by taking into account the following information:

1. Performance-based pay – The pay shall be subject to the achievement of the Group's performance, based on Key Performance Indicators (KPIs) of financial, customer, internal/business process and learning and growth perspectives.
2. Strategic initiatives of the Group – the progress of corporate strategies per the Vision 2025 to add value to the business and shareholders.
3. Competitive compensation policy – the compensation is benchmarked with other listed companies in the same industry, adopting an entrepreneurial approach with emphasis on the performance-based bonus in order to be competitive with other companies.

REMUNERATION STRUCTURE OF THE CHIEF EXECUTIVE OFFICER AND EXECUTIVE DIRECTORS

The package includes remuneration paid in cash i.e. salary, which is reviewed annually; the bonus is variable and dependent on yearly performance. Other forms of compensation include the provident fund scheme, health and life insurance policy(s), and employee stock options program.

7.4.3 Total executives' remuneration

In 2021, remuneration including salary, bonus and provident fund for 7 executives as defined by the SEC was Baht 76 million.

7.5 Personnel

On 31st December 2021, the Group had a total headcount of 2,236 persons consisting of operation of 1,734 persons, managements 204 persons, and head office headcount of 298 persons. The Group paid a total remuneration to all employees of Baht 1,422 million in the forms of salaries, overtime, living allowance, bonus, social security contributions and provident funds.

	TIPCO ASPHALT PCL	THAI BITUMEN CO., LTD.	RAYCOL ASPHALT CO., LTD.	ALPHA MARITIME CO., LTD.	TASCO SHIPPING CO., LTD.	BITUMEN MARINE CO., LTD.	RAYANA 1020 CO., LTD.	TIPCO MARITIME CO., LTD.	THAI SLURRY SEAL CO.,LTD.	THANOMWONG CO., LTD.	SUBSIDIARY IN CAMBODIA	SUBSIDIARIES IN CHINA	SUBSIDIARIES IN MALATSI	SUBSIDIARIES IN SINGAPORE	SUBSIDIARIES IN VEITNAM	SUBSIDIARIES IN INDONESIA	SUBSIDIARY IN LAO	Total
Operation (person)	264	60	48	34	36	40	-	37	189	444	87	49	165	-	126	155	-	1,734
Managements (person)	73	3	2	-	-	-	-	2	9	31	6	5	37	-	17	16	3	204
Head office (person)	112	5	4	-	-	-	-	23	10	29	18	6	15	4	21	28	23	298
Total (person)	449	68	54	34	36	40	-	62	208	504	111	60	217	4	164	199	26	2,236
Remuneration for employee (million Baht)	533	44	30	30	36	32	-	30	71	186	6	49	234	35	79	17	9	1,422

Significant changes in number employee for the past three years

Total employee in year 2021, 2020 and 2019 were 2,236, 1,711 and 1,629 persons, respectively. Increase in number of employees mainly resulted from acquisition of Thai Slurry Seal Co.,Ltd. and Thanomwong Co., Ltd.

Provident Fund

As part of the selection of the provident fund manager, the Company strongly encourages the welfare committee to consider asset management companies which adopt the Investment Governance Code: (“I Code”). The asset management company shall consider the environment, society and governance as part of investment. In this regard, the Company appointed “Principal Asset Management Company Limited” as its provident fund manager. In our commitment to long-term benefits, guidelines for fund manager selection are shared to members of the provident fund. As of end of 2021, 945 employees in the Group in Thailand participated the provident fund which account for 72%.

7.6 Other Key Information

7.6.1 Responsible Executives

Accounting Supervisor

The Company assigned Mrs. Nattamon Ingkapradit to be directly responsible for the supervision of accounting, effective from 18th June, 2018. Please see information regarding the Accounting Supervisor in Attachment 1.

Company Secretary

The Board of Directors appointed Mr. Thanapol Laosiripong, Manager - Corporate Affairs and Planning, on 13th August 2015 as the Company Secretary to take responsibility as set forth by the law. The Company Secretary reports functionally to the Chairman of the Board of Directors, and operationally to the Chief Executive Officer. Details of the company secretary profile and responsibilities appear in Attachment 1.

Head of Internal Audit

The AC and the Chief Executive Officer jointly appointed Mr. Joseph Soosay as Senior Manager - Internal Audit Department (IAD) with effect from 16th July 2012.

We hereby express our opinion that the Senior Manager - Internal Audit Department of the Company is adequately experienced to manage the IAD. As a certified internal auditor, he is suitably qualified to fulfil his duties in accordance with the Standards of the Institute of Internal Auditors. Please see information regarding the Accounting Supervisor in Attachment 3.

7.6.2 Head of Investor Relations

Information requests, comments and inquiries related to investor relations should be made by contacting Mr. Thanapol Laosiripong at tel. +66 2273 6642, fax. +66 2271 3363, or by email at investors@tipcoasphalt .com.

7.6.3 Audit Fee

For the fiscal year 2021, the Company and its subsidiaries paid for audit fee and non-audit fee to auditors as follows:

Audit fee

Company/Subsidiary	Total (THB Million)
Tipco Asphalt Public Company Limited	3.05
Subsidiaries in the Group	8.70

Non-audit fee

Company/Subsidiary	Scope of service	Total (THB Million)
Tipco Asphalt Public Company Limited	Tax Advisor, Training	0.87
Subsidiaries in the Group	Tax advisor, Consultant, Agreed - upon procedures - Compliance with conditions stipulated in the investment promotion certificate	2.55

8. Highlights of Corporate Governance

8.1 Performance of the Board of Directors

8.1.1 Recruitment, Development, and Performance Assessment of the Board of Directors

1. Independent Directors

The Board of Directors shall consist of at least one-third independent directors. Independent directors shall possess the qualifications as specified in the Securities and Exchange Commission's guidelines. The Company's definitions of an Independent Director are as follows:

1. Holding no more than 1 % of total voting shares* including the shareholding of persons related to the independent directors;
2. Is not currently and has never been the Company's executive director, worker, employee, salaried consultant, or controlling parties*. Exception: It has been at least two years since the person held their previous position;
3. Not related by blood or legally registered with any other directors, executives, major shareholders, controlling parties, or persons who will be nominated as directors, executives, or controlling parties of the company or subsidiary;
4. Not currently having and never having had any relations with the company* that may impede, compromise or interfere with the person having independent views. Also, the person should not currently be and never have been a significant shareholder or controlling person for persons having business relations with the company*. Exception: It has been at least two years since the person has held the position;
5. Is not currently and has never been the Company's auditor*. Also, the person should not currently be or never have been a significant shareholder controlling person, or partner of the current auditor's auditing firm*. Exception: It has been at least two years since the person held the position;
6. Not currently providing or never having provided professional services, legal consulting and financial consulting services to the company with a fee of more than THB 2 million per year*. Also, the person should not currently be or never have been a significant shareholder, controlling person, or partner of any of our current service providers. Exception: It has been at least two years since the person held the position;
7. Not currently a director appointed to represent the Company's directors, major shareholders, or the shareholder related to a major shareholder;
8. Not currently operating under similar business models and/or significant competitors to the Company or any of its subsidiaries; or not be a significant partner of the partnership, executive or director, salaried worker, employees, or consultants; or holding more than 1% of voting shares of any other companies operating under a similar business nature that are significant competitors to the Company and its subsidiaries;
9. Not under any conditions that may impede the person from having independent views towards the Company's operations.

* Including the parent company, subsidiary, affiliate, major shareholder(s), or controlling parties of the company

At present, the Board of Directors consists of 5 independent directors out of a total 14 directors, representing 36% of Board membership.

2. Nomination and Appointment of Directors & Chief Executive Officer

Nomination of Directors

In accordance with the Group's policy on Director qualifications and nomination, the N&R committee is in charge of nominating appropriate persons as members of the Board of Directors to the Board of Directors and Shareholders meeting as necessary. As part of director nomination, the N&R committee may consider the director pool from the IOD for potential candidates, if any.

In 2021, despite there being no new director appointment, the N&R committee reviewed and confirmed that the Board of Directors collectively had between them all of the required skills according to the policy on director qualifications and nomination.

In our commitment to enhancing the minority right of shareholders, prior to the 2022 Annual General Meeting (AGM), shareholders of the Company were entitled to propose agendas and questions for the 2021 Annual General Meetings. Shareholders were allowed to exercise such rights from the period 6th October 2021 to 30th December 2021 for consideration by the Board of Directors. Should any proposed agenda be included in the meeting, the Company will specify in the notice of the meeting that said agenda was proposed by a shareholder.

However, in the case where the proposed agenda was rejected, the Company will inform shareholders of the reasons for its rejection at the annual general meeting of shareholders. Moreover, any shareholder is entitled to nominate any qualified candidate for election as a Board member in advance. The N&R Committee will consider the proposed nominee(s) together with other nominated persons according to the Company's criteria for the nomination of directors. The N&R Committee shall then present the nominee(s) to the Board for consideration before proposing them to the shareholders' meeting for approval.

Voting requirement of appointment of Directors

Pursuant to Clause 15 of the Company's Articles of Association, the rules and procedures for electing directors are as follows:

1. Separate round of voting by the shareholders shall take place for each Director position;
2. Each shareholder has a voting right of one vote per share for each available Director position;
3. Each Director position shall be allocated to the person who has received the most affirmative votes, provided that the number of affirmative votes received represents at least three quarters of the total number of votes by shareholders attending the meeting by proxy or physical presence and having the right to vote; and
4. Director(s) who are also shareholder(s) are not eligible to vote for their own re-election.

DIRECTOR'S ORIENTATION

For new Directors, the Company arranges an orientation program to inform him/her of the Group's business policies, capital structure, shareholding structure, business performance, information systems, code of ethics and related laws and regulations. Moreover, each Director receives a Director's Handbook containing all relevant information. New Directors also receive a briefing from the Chief Executive Officer that covers the Company policies, relevant information including the capital structure, shareholders, performance, and processes in use at the Company, laws, regulations, a marketing/ operational overview, and updates on performance.

KNOWLEDGE IMPROVEMENT OF THE DIRECTORS AND EXECUTIVES

The Board of Directors has a policy to support and facilitate participation in trainings and continuous knowledge improvement for directors and executives. The Company has encouraged directors and executives to attend training courses organized by the Thai Institute of Directors (IOD), the Securities and Exchange Commission (SEC), and the Stock Exchange of Thailand (SET). In 2021, training of each director can be summarized as follows:

Name	Course	By
1. Mr. Chainoi Puankosoom	Chairman Forum 1/2021 “Chairing a Virtual Board meeting”	Thai Institute of Directors
2. Mr. Nopporn Thepsithar	Advanced Audit Committee Program (AAP 41/2021)	Thai Institute of Directors
	Ethical Leadership Program (ELP 22/2021)	Thai Institute of Directors
3. Mr. Jean-Marie Verbrugge	Director Certification Program (DCP 313/2021)	Thai Institute of Directors
4. Mr. Chaiwat Srivalwat	2021 IOD Director Forum 1/2021 “GRC Through the Perfect Storm ”	Thai Institute of Directors

BOARD SELF ASSESSMENT COLLECTIVE AND INDIVIDUAL SELF-ASSESSMENT OF THE BOARD OF DIRECTORS

The Company applies the Board Self-Assessment form designed by the Stock Exchange of Thailand (“SET”). The assessment consists of (i) A collective Self-assessment and (ii) Individual Self-assessments. The main objective of the self-assessment form is to evaluate the performance of the Board as a team, and of the Directors as a collective body and on an individual basis, in light of recognized best practices and principles of good corporate governance. The procedures are as follows:

1. The Board of Directors performs self-assessment evaluations under guidelines provided by the SET;
2. The Company Secretary summarizes the self-assessment results of all members of the Board of Directors; and
3. The Company Secretary reports the self-assessment results to the Board of Directors and ensures the results are used to improve the performance of the Board

The six categories covered by the collective and individual Self-Assessment Forms are as follows:

1. Structure and qualifications of the board (Collective and individual)
2. Roles, duties and responsibilities of the board (Collective and individual)
3. The board meetings (Collective and individual)
4. Duties of Directors (Collective)
5. Relationship with Management (Collective)
6. Director’s self-improvement and management training (Collective)

The Company scored 3.82 out of 4 and 3.84 out of 4 on the collective and individual forms for the Board Self- Assessment evaluations respectively.

SELF-ASSESSMENT OF SUB-COMMITTEES

The sub-committees, comprising the Executive Directors Committee, the Audit Committee, the Nomination and Remuneration Committee, and the Corporate Governance Committee shall perform self-assessments once a year to reflect operation efficiency under the principles of good corporate governance in compliance with the Corporate Governance Report (“CGR”). These self-assessments include (i) Collective self-assessments of the sub-committees and (ii) individual self-assessments of the sub-committees. Procedures are as follows:

1. The sub-committees perform self-assessment evaluations under the principles of good corporate governance of the Thai Institute of Directors Association (IOD) and guideline practices of Sub-committees;
2. The Company Secretary summarizes and reports the self-assessment results to the Sub-committees and ensures the results are used to improve performance of all the sub-committees; and
3. The Company Secretary reports the self-assessment results of the sub-committees to the Board of Directors.

The categories covered by the collective and individual Self-Assessment Forms of the sub-committees are as follows:

	Collective				Individual			
	EC	AC	N&R	CG	EC	AC	N&R	CG
1. Structure and qualifications of the board	✓	✓	✓	✓	✓	✓	✓	✓
2. Roles, duty and responsibilities of the board	✓							
3. The board meetings	✓	✓	✓	✓	✓	✓	✓	✓
4. Duties of directors	✓	✓	✓	✓	✓	✓	✓	✓
5. Relationship with Management	✓							
6. Director’s self-improvement and management training	✓							

Results of the assessment of all the sub-committees in 2021 were summarized as follows:

Sub-committees	Result of the assessment	
	Collective assessment	Individual assessment
1. Executive Committee	3.68	3.67
2. Audit Committee	3.98	4.00
3. Nomination and Remuneration Committee	3.92	3.85
4. Corporate Governance Committee	4.00	4.00

Thus, the Company records and reports the assessment results of both of the Board of Directors and the sub-committees to all the Directors for their acknowledgement.

NOMINATION OF THE CHIEF EXECUTIVE OFFICER

The Board of Directors shall consider for approval candidates proposed for the position of Chief Executive Officer, as nominated by the N&R committee. The assessment of the prospective Chief Executive Officer is based on criteria including:

- (1) knowledge of and experience in the asphalt, petroleum and road-construction industries;
- (2) good relationship with relevant networks in our industries; and
- (3) possessing the desired competencies of leadership stipulated in the Group's Core Values.

PERFORMANCE ASSESSMENT OF THE CHIEF EXECUTIVE OFFICER AND TOP EXECUTIVES

The N&R committee assesses the performance of the Chief Executive Officer and other executive officers based on the Company's operating results, implementation of the Board's policies, BSC (Balanced Scorecard) financial and non-financial performance, e.g. maintaining CGR score, recertification for CAC program. The N&R committee will then consider the appropriate remuneration for the Chief Executive Officer and Executive Directors and propose these to the Board for approval.

The Board also conducts its own CEO Self-Assessment by using the form recommended by the SET. The main objective of the self-assessment form is to evaluate the performance of the Chief Executive Officer.

THE 3 CATEGORIES COVERED BY THE CEO SELF-ASSESSMENT FORM ARE AS FOLLOWS:

1. Status of achievements;
2. Performance measures, e.g. strategy formulation, financial planning, non-financial KPI such as CGR score; and
3. Development need

SUCCESSION PLAN

The Board has assigned the N&R committee to be responsible for designing suitable succession plans for the Chief Executive Officer and other top executives.

In 2021, there were two approaches of development. First was executive coaching, which was conducted under the consultancy of an external expert – Development Dimensions Internationals Inc. This coaching was provided to the incumbent CEO and to successors to top management positions. Reports of the executive coaching programs were submitted to the Board of Directors. In addition, the continuing development by job rotation programs were conducted internally for successors of top management positions, as part of our belief in learning from expanding roles to face future responsibilities.

8.1.2 Meeting Attendance and Remuneration of Individual Directors

BOARD MEETINGS

1. The Board of Directors must hold at least five meetings a year by setting meeting dates in advance and may convene extraordinary sessions if necessary;
2. The Chairman or the assigned person shall send meeting invitations specifying the date, time, venue, and agenda details to all Directors at least five business days ahead of the meeting. Except for urgent cases where the company's interests need protecting, notification of the meeting can be given through other means and the meeting can be convened earlier;

3. At a meeting of the Board of Directors, a quorum is constituted when at least twelve Directors (more than two-thirds of the total number of directors) are present. If that quorum is not present within the first thirty minutes from the time when the meeting was set to begin, or if the quorum dissolves during the meeting, the meeting shall be adjourned for a minimum of seven business days;
4. In the event that the Chairman of the Board does not attend the meeting or is unable to perform his/her duty, the Vice Chairman shall step in as Chairman of the meeting. If the Vice Chairman is not present or is unable to perform his duty, the Directors present may elect one of their members to be chairman of the meeting;
5. Decisions at the meeting shall be made by majority vote;
6. Each Director shall have one vote, but a director who has interests in any matter shall not be entitled to vote on said matter; and
7. The Company Secretary or the assigned person is responsible for preparing the minutes of the meetings and for arranging the safe keeping of such certified minutes which need approval by the Directors at the 25th Floor, Tipco Tower 1, 118/1 Rama 6 Rd., Phayathai Sub-District, Phayathai District, Bangkok 10400, and are then made available for review.

The schedule for every meeting is set annually in advance. The attendance of the Board of Directors Meetings, Audit Committee Meetings, Nomination and Remuneration Committee Meetings, Corporate Governance Meetings, and Shareholders' Meeting for 2021 by all Directors is summarized as follows:

Name	Position	Attendance of Meetings (Times)				
		Board of Directors Meeting ^{1/}	Audit Committee Meeting	Nomination and Remuneration Committee Meeting	Corporate Governance Committee Meeting	Shareholders' Meeting
Mr. Chainoi Puankosoom	Chairman	5/5	-	-	-	1/1
Mr. Koh Ban Heng	Vice Chairman Member of Nomination and Remuneration committee	5/5	-	2/2	-	0/1
Mr. Phirasilp Subhapholsiri	Independent Director Chairman of the Audit Committee Chairman of the Corporate Governance Committee	5/5	12/12	-	4/4	1/1
Mr. Nopporn Thepsithar	Independent Director Chairman of the Nomination and Remuneration committee Member of Audit Committee	5/5	12/12	2/2	-	1/1
Mr. Niphon Suthimai	Independent Director Member of the Audit Committee ^{2/} Member of Corporate Governance committee	5/5	11/11	-	4/4	1/1

Name	Position	Attendance of Meetings (Times)				
		Board of Directors Meeting	Audit Committee Meeting	Nomination and Remuneration Committee Meeting	Corporate Governance Committee Meeting	Shareholders' Meeting
Mr. Jean-Marie Verbrugghe	Director	5/5	-	-	-	1/1
Mr. Frederic Gardes	Director	5/5	-	-	-	0/1
Ms. Laksana Supsakorn	Director	5/5	-	-	-	1/1
Mr. Somchit Sertthin	Director Member of Nomination and Remuneration committee	5/5	-	2/2	-	1/1
Mr. Jacques Pastor	Executive Director Member of Nomination and Remuneration committee	5/5	-	2/2	-	1/1
Mr. Chaiwat Srivalwat	Executive Director Chief Executive Office Member of the Corporate Governance Committee	5/5	-	-	4/4	1/1
Mr. Sitilarb Supsakorn	Executive Director	5/5	-	-	-	1/1
Mr. Hugues de Champs	Executive Director	5/5	-	-	-	1/1
Mr. Jacques Marechal	Executive Director Member of the Corporate Governance Committee	5/5	-	-	4/4	1/1

1/ In the Board of Directors meeting No.5/2021 on 10th November 2021, there was an agenda regarding discussion among members of the Board of Directors in the absence of Executive Directors.

2/ Mr. Niphon Suthimai was appointed as a member of the Audit committee in replacement of Mr. Parnchalerm Sutatam with effect from 14th January 2021.

Board Remuneration

The N&R committee is in charge of proposing the remuneration of the Board of Directors and sub-committees to the Board of Directors and shareholders. As part of this proposal, suggested remuneration is linked with the roles and responsibilities of the Board of Directors, their current strategies, and long-term goals. The remunerations are competitive, and benchmarked against the average remuneration of companies in relevant industries. The remuneration consists of fixed remuneration and variable remuneration.

Fixed Remuneration

2021 the Annual General Meeting resolved to approve the 2021's fixed remuneration of the Board of Directors and sub-committees with the following details:

Position	2021 (Baht)	
	Per member	Total
Chairman of the Board	600,000	600,000
Independent Director/Executive Director/Director (13 persons)	400,000	5,200,000
Chairman of Audit committee	500,000	500,000
Audit committee member (2 persons)	400,000	800,000
N&R committee member (4 persons)	60,000	240,000
Chairman of CG committee	100,000	100,000
CG committee member (3 persons)	80,000	240,000
Total		7,680,000

Variable remuneration

The 2021 Annual General Meeting resolved to approve the 2021's variable remuneration of the Board of Directors and sub-committees with the following details:

- In the event that the Company is profitable in 2021, the Board of Directors is authorized to approve variable remuneration with the following conditions:
- Variable remuneration payment of the Company's Financial Year 2021 will be determined by the Board of Directors with a maximum of 1 time of fixed annual director remuneration to all board members;
- For those directors whose directorship is less than one year, their remuneration will be paid on a pro-rata basis.
- Only sitting directors shall receive such variable remuneration.

REMUNERATION FOR THE BOARD AND EXECUTIVES

1. In 2021, total annual fixed, variable, and extra-variable remuneration in cash stood at Baht 7,532,350; Baht 6,028,416 and Baht 3,679,782 respectively.
2. In 2021, there was no payment of non-financial remuneration to the Board of Directors.
3. Other remuneration: -None-

Name	Scope of Authority	2020 (THB)			2021 (THB)		
		Fixed	Variable ^{1/}	Extra Variable ^{2/}	Fixed	Variable ^{1/}	Extra Variable ^{2/}
1. Mr. Chainoi Puankosoom	Chairman ^{3/}	376,230	-	-	600,000	575,410	575,410
	Vice Chairman	111,680	250,000	250,000	-	-	-
	Independent Director	-	-	-	-	-	-
2. Mr. Koh Ban Heng	Vice Chairman/	362,500	250,000	250,000	400,000	400,000	400,000
	Member of Nomination and Remuneration committee ^{4/}	-	-	-	-	-	-
	Independent Director	-	-	-	-	-	-
3. Mr. Phirasilp Subhapholsiri	Independent Director	362,500	250,000	250,000	400,000	400,000	400,000
	Chairman of the Audit Committee	500,000	-	-	500,000	-	-
	Chairman of the Corporate Governance committee	100,000	-	-	100,000	-	-
4. Mr. Noppom Thepsithar	Independent Director	362,500	250,000	250,000	400,000	400,000	400,000
	Chairman of the Nomination and Remuneration committee	60,000	-	-	60,000	-	-
	Member of Audit Committee	400,000	-	-	400,000	-	-
5. Mr. Niphon Suthimai	Independent Director	362,500	250,000	250,000	400,000	400,000	400,000
	Member of Audit Committee ^{5/}	-	-	-	300,000	-	-
	Member of Corporate Governance committee ^{6/}	51,803	-	-	80,000	-	-
	Member of Nomination and Remuneration committee ^{4/}	-	-	-	38,852	-	-
6. Mr. Jean-Marie Verbrugge	Director ^{7/}	220,491	-	-	373,498	293,989	293,989
7. Mr. Frederic Gardes	Director	362,500	250,000	250,000	400,000	400,000	400,000
8. Ms. Laksana Supsakorn	Chairman ^{3/}	198,770	500,000	500,000	-	-	-
	Director	250,820	-	-	400,000	424,590	424,590
9. Mr. Somchit Serththin	Director	362,500	250,000	96,575 ^{8/}	400,000	400,000	-
	Member of Nomination and Remuneration committee ^{8/}	-	-	-	60,000	-	-
10. Mr. Jacques Pastor	Executive Director	362,500	250,000	-	400,000	400,000	-
	Member of Nomination and Remuneration committee	60,000	-	-	60,000	-	-
11. Mr. Chaiwat Srivalwat	Executive Director and Chief Executive Office	362,500	250,000	-	400,000	400,000	-
	Member of the Corporate Governance committee	80,000	-	-	80,000	-	-
12. Mr. Sitilarb Supsakorn	Executive Director	362,500	250,000	-	400,000	400,000	-
13. Mr. Hugues de Champs ^{9/}	Executive Director	248,634	-	-	400,000	348,634	-
14. Mr. Jacques Marechal	Executive Director	362,500	250,000	-	400,000	400,000	-
	Member of the Corporate Governance committee	80,000	-	-	80,000	-	-
15. Mrs. Anne Marie Machet ^{7/}	Independent Director ^{7/}	168,511 ^{7/}	250,000	250,000	-	-	-
	Member of Nomination and Remuneration committee ^{6/}	75,902 ^{7/}	-	-	-	-	-
	Member of the Corporate Governance committee ^{6/}	21,202 ^{7/}	-	-	-	-	-
16. Mr. Herve Le Bouc ^{9/}	Director	113,866	250,000	250,000	-	-	-
17. Mr. Parnchalerm Sutatam ^{10/}	Independent Director	448,292	250,000	250,000	-	385,793 ^{10/}	385,793
	Member of Audit Committee	485,792	-	-	-	-	-
	Member of Nomination and Remuneration committee	117,869	-	-	-	-	-
Total		7,794,862	4,000,000	2,846,575	7,532,350	6,028,416	3,679,782

- 1/ 2020 AGM and 2021 AGM both resolved that on condition that the Company is profitable and subject to approval of the Board of Directors, variable remuneration payments not exceeding one time of the total annual fixed remuneration of all the Board of Director members shall be considered and paid by the Company. For directors whose directorship is less than one year, he/she shall receive his/her remuneration on a Pro-Rata basis. The Board of Directors meeting No.2/2020 and No.2/2021 resolved that 2020 and 2021 variable remunerations were paid at Baht 4,000,000 and Baht 5,642,623 respectively.
- 2/ The N&R committee and the Board of Directors may propose extra variable remuneration, subject to shareholder approval. 2020 AGM and 2021 AGM resolved the payment of extraordinary variable remuneration to all non-executive members at the maximum of 1 time of annual fixed remuneration.
- 3/ The Board of Directors meeting No. 2/2020 held 14th February 2020 resolved to appoint Mr. Chainoi Puankosoom as Chairman of the Board of Directors in replacement of Ms. Laksana Supsakorn with effect from 15th February 2020 (should it be 14th like the vice chairman).
- 4/ The Board of Directors meeting No. 1/2021 held on 14th January 2021 resolved to appoint Mr. Koh Ban Heng as a member of the Nomination and Remuneration committee, replacing Mr. Niphon Suthimai. This appointment became effective on 14th January 2021.
- 5/ The Board of Directors meeting No. 1/2021 held on 14th January 2021 resolved to appoint Mr. Niphon Suthimai as a member of the Audit committee in replacement of Mr. Parnchalerm Sutatam, with effect from 14th January 2021.
- 6/ The Board of Directors meeting No. 3/2020 held on 8th May 2020 resolved to appoint Mr. Niphon Suthimai as a member of the Corporate Governance committee and of the Nomination and Remuneration committee in replacement of Mrs. Anne Marie Machet who resigned on 7th April 2020. This appointment became effective on 8th May 2020.
- 7/ 2020 AGM resolved the appointment of Mr. Jean-Marie Verbrugghe a new member of the Board of Directors in replacement of Mrs. Anne Marie Machet who resigned on 7th April 2020. This appointment became effective on 7th April 2020.
- 8/ The Board of Directors meeting No. 6/2019 held on 8th November 2019 resolved the appointment of Mr. Somchit Sertthin as a member of the Nomination and Remuneration committee with effect from 8th November 2019.
- 9/ The Board of Directors meeting No. 2/2020 held on 14th February 2020 resolved the appointment of Mr. Hugues de Champs as a member of the Board of Directors in replacement of Mr. Herve Le Bouc who resigned on 16th February 2020. This appointment became effective on 17th February 2020.
- 10/ Mr. Parnchalerm Sutatam, Independent Director, passed away on 19th December 2020. Due to his passing, the last portion of fixed remuneration of the Board of Directors, the Audit committee and the Nomination and Remuneration committee in 2020, originally scheduled for 2021, was paid in late 2020. The 2021 AGM approved the payment of the variable remuneration from 2020's profitable operations of the Company to the late Mr. Parnchalerm Sutatam of Baht 385,793 on a pro-rata basis.

Directors' & Officers' liability insurance

The Company has a Directors and Officers (D&O) liability insurance policy in place. The insurance policy has a maximum coverage of Baht 500 million that protects Directors and Officers from claims made against them.

8.1.3 Oversight of subsidiaries, associates, and joint-venture companies

The appointment of directors and executives of a subsidiary and associated company to oversee and manage its operation is a key governance mechanism that ensures the subsidiary and associated company complies with the policy, goals, vision, medium-term business plans, and strategic growth plans efficiently. As such, the Board of Directors of Tipco Asphalt Public Company Limited (the Company) formulated their own policy for the appointment of directors and executives to subsidiaries and associated companies.

The Board of Directors of the Company has assigned the Executive Committee to appoint and transfer company representatives to the Board or executive positions in subsidiaries/associated companies in accordance with shareholding proportion.

The nominated person shall have the necessary qualifications, knowledge, ethics, sense of responsibility, and leadership qualities deemed appropriate.

Roles and responsibilities

1. Ensuring that the subsidiary and associated company comply with relevant laws, regulations, Articles of Association and policy;
2. Acting in the best interests of the subsidiary and associated company and ensuring that the direction of the subsidiary/associated company's strategies, policies, and business plans is consistent with that of the Company;
3. Reporting the operating results and performance of the subsidiary and associate company to the Company on a regular basis;
4. Supervising the subsidiary and associated company to ensure compliance with the requirements of the Stock Exchange of Thailand, where such requirements are applicable to the subsidiary and associate company, e.g. entering into related party transactions, acquisition or disposal of significant assets;
5. Ensuring that subsidiary and associated company have appropriate and adequate internal control systems; and
6. Performing any other duties in accordance with the Board of directors of the subsidiary/associate company and/or the shareholders' meeting of the subsidiary and associated company;

8.1.4 Monitoring Compliance of Corporate Governance Policy and Guidelines

The Company places importance on good corporate governance by having established policies and guidelines, detailed in the Company's Corporate Governance Policy and Code of Conduct. Good Corporate Governance is promoted to build confidence in all groups of stakeholders. In 2021, monitoring compliance of Corporate Governance Policy and Guidelines covering following matters was presented during quarterly management review. The follow-up results showed that the Company has completely implemented the guidelines for each issue. Monitoring compliance of Corporate Governance Policy and Guidelines covers 4 specific topics with the following details:

1. Conflict of Interest

Report of conflict of interest of Directors and Executives

Directors and executives are required to file reports on their own or any related person's interests regarding the management of the Company or any of its subsidiaries in accordance with the stipulated rules and regulations. Since these may cause conflicts of interest and can lead to the siphoning of assets, it is imperative for these to be disclosed in full. These reports ensure that all directors and executives adhere to the fiduciary duties they are bound to. The Company Secretary acknowledges, signs, and submits these reports to the Chairman of the Board and the Chairman of the Audit Committee within 7 days of their submission in compliance with Section 89/16 of the Securities and Exchange Act, B.E. 2535 (As amended).

In 2021, 2 appointed executives filed "Form(s) to report on interests by Directors and Executives".

Report of conflict of interest of Employee

The Group continuously strives for good corporate governance practices to maintain its sustainable development. To ensure professionalism and integrity in conducting our business, the Group has reviewed its Code of Ethics to minimize potential conflicts of interest between employees and the Company. Potential conflicts of interest covered by the Code of Ethics include those involving family members of employees – parents, full-blooded brother/sister, legal spouses, children and adopted children.

While all employees are required to acknowledge their review of the Company's Code of Ethics, there is an additional requirement for the Board of Directors, all Management, and all employees in sales, procurement and purchase, to sign and submit the "Conflict of Interest: Acknowledgement and Disclosure" form. They have a responsibility to promptly notify the Group Management in writing, with an acknowledgement by the Chief People Officer, if they at any time become aware of any actual or potential conflicts of interest, or if the information provided becomes inaccurate or incomplete.

Therefore, all actual and potential conflicts of interest must be disclosed whenever management and employees are discussing and making decisions related to any business matter.

In 2021, 100% of defined staffs signed the Conflict of Interest declaration form.

2. Insider Trading

The Company has an established policy and Code of Ethics governing the use of internal information, which have been incorporated into employee regulations with penalties for executives or employees who disclose internal information to outsiders for personal gain with the following details:

- Directors and executives, as well as their spouses, cohabitating partners, and minor children under legal age, including legal entities where they have more than 30% shareholding of the number of all voting rights of the juristic person, according to Article 258 of the Securities and Exchange Act of 1992, must notify and distribute information about shares held, as well as reporting any changes to SEC every time they buy, sell, transfer, or receive shares within three days of the change to comply with Article 59. Failure to do so will lead to punishment, as decreed by Clause 275 of the Securities and Exchange Act of 1992.
- In addition, the summary of the shareholding of all directors and top executives are reported quarterly to the Board of Directors meeting.
- Finally, under the Company's Code of Ethics, the Board of Directors, executives, and employees working in related departments, are prohibited from trading the Company's shares for 21 days prior to the release of the Company's quarterly and annual financial statements (blackout period) until the first calendar day after the announcement date.

In 2021, there were no cases of insider trading.

3. Anti-Corruption

The Board of Directors of the Company adopted its anti-corruption policy with the ultimate aim of preventing corruption across all value-chain activities while maintaining vigilant operations.

The Risk Management Committee established anti-corruption guidelines alongside a regular monitoring system, the results of which are reported to the Board of Directors.

The Company will continuously promote and encourage all employees and stakeholders to raise awareness for the eradication of corruption. Anti-corruption will be part of the orientation program to new employees and all employees shall annually acknowledge the Code of Ethics which includes anti- corruption prevention.

Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)

The Company has encouraged its Directors to attend the Anti-Corruption for Executives (ACEP) training course, while employees are encouraged to consistently participate in any events related to anti-corruption efforts and initiatives.

In 2014, the Company signed the Declaration of Intent in View of Establishing Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). The Company developed its policy, risk assessment framework, procedures, monitoring system, and reporting in accordance with the Self-evaluation Tools of the CAC.

The Company has been recognized as a certified company by the CAC. It was first certified on 10th November 2017 and has since passed all subsequent recertifications, most recently on 30th June 2020. This recertification is valid until 30th June 2023. To advocate its continuous pursuit of anti-corruption, Mr. Pana Ratanabanangkoon, CAC Project Director, and his team visited the Company to conduct a special session on the topic of recognition and the development of CAC.



Following the implementation of the self-evaluation tools 4.0 by the Institutes of Directors with effect from July 2021, the Company is undertaking the necessary actions, e.g. risk assessment, policy and guideline reviews, communication, ahead of the next recertification.

In addition to policy, implementation, monitoring and reporting, the Company regularly participates in the following anti-corruption events:

- 19th August 2015: the Company's representatives participated in the Anti-corruption Program seminar organized by the Office of the National Anti-Corruption Commission in collaboration with the Royal Thai Government.
- 2016: National Anti-Corruption Day activities with the theme of "Sin of Cheating" at the Sanam Luang Royal Plaza, Bangkok, organized

by the Anti-Corruption Organization of Thailand (ACT) in collaboration with the Thai Chamber of Commerce and the Board of Trade of Thailand.

- 6th September 2017: Anti-Corruption Day with the theme "New Government! Old corruption! or รัฐบาลใหม่! คอร์รัปชันเก่า" at Centara Grand & Bangkok Convention Centre at CentralWorld, organized by the Thai Institute of Directors ("IOD").
- 9th December 2017: the Company's representative participated in the Anti-Corruption Day (Thailand) at Muangthongthaini, Nonthaburi.
- 6th September 2018: Anti-Corruption Day with the theme "คนไทย ตื่นรู้สู้โกง" at Bhiraj Tower at Bangkok International Trade & Exhibition Centre (BITEC).
- 7th December 2018: Anti-Corruption Day (Thailand) at Muangthongthaini, Nonthaburi.
- 6th September 2019: Anti-Corruption Day with the theme "รวมพลัง อาสาสู้โกง" at Bhiraj Tower at Bangkok International Trade & Exhibition Centre (BITEC).
- 7th October 2019: the Company issued the No Gift Guideline through the Anti-Corruption Guideline Manual in order to provide comprehensive guidance on effective implementation of the Group's Anti-Corruption Policy and controls.
- 9th December 2019: Anti-Corruption Day (Thailand) "เดินหน้า ล่าโกง" at Muangthongthaini, Nonthaburi.
- 15th September 2020: Anti-Corruption Day with the theme "Power of Data" through video conference.

- 6th September 2021: Anti-Corruption Day with the theme “คุณเด็กสร้างชาติ” through Facebook live.
- 9th December 2021: Anti-Corruption Day (Thailand) “Zero Tolerance ไม่ทำ ไม่ทน ไม่เฉย รวมไทยต้านโกง” through Facebook live.

สร้างชาติไทยไร้คอร์รัปชัน!
 กับเหล่าคนรุ่นใหม่เจ้าของไอเดียสร้างสรรค์มือด้านโกง
 พร้อมสานต่อให้กลายเป็นจริงกับหลากหลายองค์กร
 ที่จะมาร่วมคบเด็กสร้างชาติไปด้วยกัน

คุณเด็กสร้างชาติ
วันต่อต้านคอร์รัปชัน 2564

ร่วมชม ร่วมจับมือสร้างชาติ
 ในวันจันทร์ที่ 6 กันยายน 2564
 เวลา 14.00 - 15.30 น.

รับชมผ่านทาง **LIVE**
 FB : องค์กรต่อต้านคอร์รัปชัน

ACT องค์กรต่อต้านคอร์รัปชัน (ประเทศไทย)
 ANTI-CORRUPTION ORGANIZATION OF THAILAND

depa DGA GBDI NIA ITU

4. Whistleblowing

The Group expects all personnel, stakeholders, and external sources to monitor their compliance with corporate governance and the Code of Ethics, and encourages them to raise any questions and concerns they may have regarding these policies. In addition, they can report any misconduct or noncompliance, and send their enquiries to the Company Secretary, the Internal Audit, or the Human Resources Department.

Procedures pertaining to violations of the Code of Ethics and Reporting of Violations of or Non- Compliance with the Code of Ethics are made known to, and must be observed by all employees.

In the event employees notice (or suspect) a violation of, or non-compliance with, the Code of Ethics, they may direct their questions or complaints by phone, e-mail or letter to, or personally inform any of the following persons:

1. Any independent director
2. Chief People Officer
3. Head of Internal Audit
4. Company Secretary to the Board of Directors

The above persons shall report such matters to the Chief Executive Officer -- if the issue is raised against employees below the Chief Executive Officer level; or to the Board of Directors -- if the issue is raised against the Chief Executive Officer and/or any director within 24 hours.

The Group shall investigate all complaints with due urgency and confidentiality.

The Chief Executive Officer or Board of Directors shall appoint a fact-finding committee, comprising relevant heads of departments and Human Capital Management.

The fact-finding committee is authorized to:

- Investigate facts and witnesses
- Proceed according to relevant measures
- Propose prevention to repeating cases
- Proceed with disciplinary actions and/or prosecution according to the law

All employees are expected to cooperate in the investigations as necessary, which are conducted legally, when there is a complaint of violation or non-compliance with the Code of Ethics.

At the soonest, but no later than 14 days from its instigation, the fact-finding committee shall report the result of the investigation to the Chief Executive Officer or Board of Directors. The Human Capital Management Department shall collect the investigation reports, then notify the whistle-blower and the Board of Directors, as well as the responsible persons against whom the complaint was filed.

Measures for Protection and Compensation

Any person making complaints, reports, or cooperating with a fact-finding investigation shall be protected according to the whistle-blower protection guidelines as follows:

- Those who complain, report, or cooperate may choose not to disclose their identities. However, their identities should be disclosed to the investigators appointed by the Group to facilitate the effectiveness of any such investigations.
- The Company regards such information as confidential, and discloses such information only as necessary to ensure the safety of, and prevent harm to, those who report their sources, and other individuals involved.
- Appropriate protection will be provided to those who complain, report, or cooperate if they believe that they will be under threat.
- Anyone harmed while providing information to assist the Group's investigations will be compensated in a fair and appropriate manner.

In 2021, there was no whistleblowing cases.

8.2 Report of the Audit Committee

The Audit Committee ("AC") currently consists of three independent directors who are knowledgeable and experienced in business administration, finance, accounting, engineering and internal auditing. The AC comprises Mr. Phirasilp Subhapholsiri, Mr. Nopporn Thepsithar and Mr. Niphon Suthimai. Mr. Phirasilp serves as the Chairman of the AC.

In 2021, the AC performed its duties as required by the Company's AC Charter and as assigned by the Board of Directors (if any), in conformance with the regulations of the Stock Exchange of Thailand ("SET"). The AC, through the Company's Internal Audit Department ("IAD") has continued to emphasise the importance of anti-corruption controls throughout the Group.

In 2021, the AC held 12 meetings, with attendance as tabulated below:

Name	Meeting Attendance/ Total Meetings
Mr. Phirasilp Subhapholsiri	12/12
Mr. Nopporn Thepsithar	12/12
Mr. Niphon Suthimai (member since 14 January 2021)	11/11

Management, the external auditor and the IAD team also attend these AC meetings as necessary. Also, the AC meets the external auditor at least once a year without the presence of management.

REVIEW OF FINANCIAL REPORTS

Every quarter, the AC reviews the quarterly and annual financial statements (of the Company and the Group) together with management and the external auditors. Among other activities, the AC holds discussions with the external auditor to ascertain the completeness and accuracy of the presentation of the Company's financial statements, key accounting adjustments, adequacy of accounting methods, scope of the audit, accuracy and adequacy of disclosures, as well as the external auditor's independence. Accordingly, the AC was satisfied that the Company's financial statements had complied with all relevant accounting standards and regulations.

The AC was satisfied that the accounting procedures and financial statements were both accurate and reliable, and that adequate and timely information had been disclosed in the financial statements for the benefit of investors and other users of the financial statements.

RISK MANAGEMENT

The current Enterprise Risk Management ("ERM") process as employed in the Company was implemented in 2013, and continues to evolve to serve the interests of the Company. The ERM practice mainly focuses on identifying and assessing the uncertainties associated with strategic, operational, and business objectives. It also follows the guidance of the Committee of Sponsoring Organizations of the Treadway Commission ("COSO")-ERM framework.

The AC oversees the ERM process of the Company. The AC has a specific agenda every quarter to review the progress of ERM matters in the Company. The AC also discusses specific key risks with the Company's management on a regular basis, and questions what mitigation plans the Company has in place to manage such risks.

The ERM process includes a formal ERM framework which consists of an ERM policy and related procedures. The corporate risks identified and assessed during this process are a key input into the development of the rolling, risk-based internal audit plan that will be applied annually as reviewed and approved by the AC.

REVIEW OF RELATED PARTY TRANSACTIONS

The AC reviews standard related party transactions of the Company on a quarterly basis, or more frequently in the event of any new class of related party transactions as reported by management. The AC confirms that such transactions are conducted fairly and performed for the best interests of the Company and its shareholders.

REVIEW OF INTERNAL CONTROL EFFECTIVENESS

The AC has reviewed the adequacy, appropriateness and effectiveness of the internal control system from the 2021 reports of the IAD on the Company and its subsidiaries. The AC is satisfied that the internal control system of the Company and its subsidiaries is adequate and effective for its business. The AC also evaluated the adequacy of the internal control system in accordance with The Securities Exchange Commission guidelines and noted that an adequate, appropriate, and effective system of internal control has been implemented.

REVIEW OF GOOD CORPORATE GOVERNANCE

The AC was satisfied that the Company has complied with the relevant laws, regulations (including regulations of the SET) and agreements with external parties (as necessary). The AC was also satisfied that significant related-party business transactions had been disclosed in the financial statements, and that the notes on such matters met the requirements set out by the SET and the Securities Exchange Commission. The AC agreed with the external auditor that such transactions conformed to the agreed criteria of normal business conduct.

OVERSIGHT OF INTERNAL AUDIT

The AC reviewed the reports of the IAD in 2021. This included oversight of new reviews as well as follow-up reviews to ascertain the completion of agreed actions by management.

In 2021, the Covid-19 pandemic continued to have a disruptive effect on the operations of internal auditing, complicated by travel restrictions in particular. Nevertheless, the IAD managed to complete key reviews pertaining to information technology general controls, controls relating to the marine operations of the Company, and follow-up reviews for selected business units in Thailand and in foreign subsidiaries.

Additionally, with the support of the AC and senior management of the Company, all team members of the IAD attended training in preparation for the Certified Professional Internal Audit of Thailand (“CPIAT”) exams as conducted by The Institute of Internal Auditors of Thailand (“IIAT”). This underscores the Company’s commitment to developing its employees in the IAD.

APPOINTMENT OF THE EXTERNAL AUDITOR FOR 2022

The AC has considered and recommended the appointment of EY Office Limited as the Company’s external auditor for another year and had also reviewed their proposed audit fees for 2022. Consequently, the AC has proposed the same to the Board for approval by the shareholders at the Annual General Meeting of 2022.

In conclusion, the AC has comprehensively performed its duties and responsibilities in accordance with the AC Charter as approved by the Board of Directors. The AC also commented that the Company and its subsidiaries had properly presented their financial statements, performed in good business conduct, and implemented an appropriate and effective internal control system and internal auditing process. The Company and its subsidiaries have complied with the relevant laws, regulations and agreements while properly disclosing related party transactions under good governance practices of transparency and trustworthiness. The Company and its subsidiaries have also continually improved the internal control system in terms of quality and suitability to its business environment.



Mr. Phirasilp Subhapholsiri
Chairman of the Audit Committee

8.3 Report of Other Sub-Committees

REPORT OF THE CORPORATE GOVERNANCE COMMITTEE

The Corporate Governance Committee (“CG Committee”) consists of 2 independent directors (Mr. Phirasilp Subhapholsiri and Mr. Niphon Suthimai), and 2 executive directors (Mr. Chaiwat Srivalwat and Mr. Jacques Marechal).

In 2021, the CG Committee continued to perform its duties as set forth in the Corporate Governance Committee Charter and held a total of 4 meetings. The main duties performed by the CG Committee were as follows:

- Reviewed and proposed to the Board improvements on corporate governance (CG) principles, policies and guidelines in accordance with the Annual General Meeting Checklist prepared by the Thai Investor Association and Corporate Governance Report of Thai Listed Companies 2021 (CGR), by the Thai Institute of Directors Association (IOD);
- Reviewed and proposed to the Board the application of each Principle and Sub-Principle of the Corporate Governance Code for listed companies 2017 (CG Code) related to the suitability for the Company’s business;
- Established the Sustainability Development policy, Stakeholder Engagement policy, Environmental policy and updated the Human Rights policy and the Corporate Social Responsibility policy;
- Monitored sustainable development performances and reviewed sustainable development related matters on a regular basis;
- Revised and proposed to the Board the revised Anti-Corruption guideline manual and Code of Ethics in preparation for the 2nd recertification under Thailand Collective Action Against Corruption (CAC).

Following all these CG practices, I am pleased to state the following achievements:

- Received Outstanding Company Performance Award for 2 consecutive years and Sustainability Excellence Award - Highly Commended (from Rising Star) for the Company with market capitalization between 10,000 - 30,000 million Baht;
- Received the Sustainability Disclosure Award in 2021 for 3 consecutive years from the ThaiPat Institute;
- Included in the Thailand Sustainability Investment list in 2021 for 4 consecutive years;
- Rated “Excellent or 5 stars”, i.e. the highest ranking of Corporate Governance Report of Thai Listed Companies 2021 (CGR) by the Thai Institute of Directors Association (IOD) for four consecutive years;
- Invited to the ASEAN Corporate Governance Scorecard 2021;
- Received 98 out of 100 points on the Annual General Meeting Checklist of the Thai Investors Association.



Mr. Phirasilp Subhapholsiri

Chairman of the Corporate Governance Committee

REPORT OF THE NOMINATION AND REMUNERATION COMMITTEE

The Nomination and Remuneration Committee (N&R committee) consists of 4 directors, 2 of whom are independent directors, namely Mr. Nopporn Thepsithar (the Chairman) and Mr. Koh Ban Heng. The other directors are Mr. Jacques Pastor and Mr. Somchit Serththin.

In 2021, the N&R Committee performed its duties in accordance with the Charter, and performed other duties as assigned by the Board of Directors. In 2021, all directors attended the 2 meetings held, with the following key matters:

1. Nomination of directors

The N&R committee screened and nominated the qualified person(s) to replace directors who retired by rotation at the 2021 Annual General Meeting to the Board of Directors and shareholders. As part of the nomination process, the N&R committee adhered to policies regarding director qualifications and nomination including the overall Board Skill Matrix.

2. The N&R committee followed up on the development of the succession plan for the Chief Executive Officer and top management for the continuity of the Company's operations. This matter was reported to the Board of Directors for acknowledgement on an annual basis.

3. The N&R committee proposes self-assessments to the Board of Directors and all sub-committees on an annual basis. These self-assessments include collective self-assessments and individual self-assessments. Furthermore, the N&R committee proposes evaluation forms for the Chief Executive Officer.

4. Proposal of remuneration

For 2021, the N&R committee proposed fixed and variable remuneration for the Board of Directors members with the following details:

- The fixed remuneration of the Board of Directors and sub-committees was deliberated based on surveys on remuneration of other listed companies in relevant industries and resulted from the self-assessments of the Board of Directors and the sub-committees
- The variable remuneration of the Board of Directors is considered by the Board of Directors using internal criteria linked to the Company's performance.
- The N&R committee also proposed the remuneration package for the Executive Directors and the Chief Executive Officer by considering certain criteria including management of the business in accordance with the goals, long-term strategies and assessment results.

5. The N&R committee encourages continuous development among members of the Board of Directors by referring relevant training courses and seminars offered regularly by the authorities and private entities.



Mr. Nopporn Thepsithar
Chairman of the Nomination &
Remuneration Committee

9. Internal Control and Connected Transactions

9.1 Internal Control

The internal control system of the Group generally conforms to the internal control model advocated by the Committee of Sponsoring Organizations of the Treadway Commission (or, "COSO"). Management has instituted an appropriate control environment for the organisation, which is further guided by the five core values of the Group (that is, Teamwork, Integrity, Prudence, Commitment and Open-mindedness).

This control environment is supported by an organisational structure that has been developed to support the realisation of the Group's strategic objectives. The organisational structure sets out clearly delineated lines of responsibility whilst promoting co-ordination across departments. A Chart of Authority (which is regularly reviewed and updated) is in place to set out the authority limits of management at all levels of the Group so they can achieve the organisational objectives.

The Group's core value of Prudence reinforces the importance of good corporate governance (or, "CG") at the Group. This is further reflected by the implementation of a systematic enterprise risk management (or, "ERM") process at the Group. This involves the identification, assessment and management of threats and or incidents that may affect the Group. The establishment of a CG Committee (a sub-committee of the Board of Directors) further emphasises the value of good CG for the Group. Risks at all levels of the Group are managed through an effective internal control system that is periodically reviewed and updated to reflect the evolving needs of the business. The system of internal controls is documented in procedural manuals and is subjected to independent reviews by the Group's internal audit function.

The Company's commitment to information technology ("IT") is clearly demonstrated by its investment in the Oracle enterprise resource planning (or, "ERP") solution, which went "live" in late-2017. The investment in the Oracle ERP system, as well as other investments in IT in recent years, have been instrumental in facilitating "work from home" initiatives in response to the ongoing Covid-19 pandemic.

The Company also has appropriate communication channels in place (through the use of IT where applicable) to facilitate the monitoring of operations and key controls by both operating management and Senior Management of the Group.

Last but not least, the Audit committee assessed and proposed to the Board of Directors the adequacy of the internal control system of the Company through a complete COSO form, as provided by the Securities Exchange Commission ("SEC"), which was prepared by management. The Board of Directors and Audit committee deemed the Company's internal control system adequate.

AUDIT COMMITTEE'S OPINION OF THE SENIOR MANAGER - INTERNAL AUDIT DEPARTMENT

The AC and the Chief Executive Officer jointly appointed Mr. Joseph Soosay as Senior Manager - Internal Audit with effect from 16th July 2012.

We hereby express our opinion that the Senior Manager - Internal Audit Department of the Company is adequately experienced to manage the IAD. As a Certified Internal Auditor, he is suitably qualified to fulfil his duties in accordance with the Standards of the Institute of Internal Auditors. The professional credentials of the Senior Manager - Internal Audit Department are listed in the table below:

FULL NAME	PROFESSIONAL CERTIFICATIONS	RECENT WORK EXPERIENCE	
		PERIOD	POSITION/ COMPANY
Joseph Mugilen Soosay Manickam	Certified Internal Auditor (CIA); Chartered Management Accountant (ACMA); Chartered Global Management Accountant (CGMA)	2012 - Present	Senior Manager - Internal Audit/ Tipco Asphalt Public Co., Ltd.
		2008 - 2012	Associate Director - Advisory Services/ PricewaterhouseCoopers FAS Ltd.

The appointment, removal and transfer of the Senior Manager - Internal Audit Department is subject to approval by the AC and the Chief Executive Officer.

9.2 Connected Transactions

According to the Notification of Capital Market Supervisory Board No.Tor Jor 21/2551 Re: Rules on Connected Transactions, ordinary business support transactions and Ordinary business support transactions with general commercial conditions can be executed by Management so long as the Board of Directors priorly approved said transactions and laid down the framework for Management to proceed. The general commercial conditions which were approved by the Board of Directors meeting no.5/2019 were as follows:

- Sales and services provided to/received from related companies are transacted in accordance with the market price/contract price
- Rental and service expenses paid to/received from related companies are in accordance with the market price/contract price
- Technical Assistance fee expenses are paid in accordance with the rate stated in the technical assistance contract

The connected transactions in 2021 are summarized below: (Details on the connected transactions of the past 3 years are shown in annual report at <http://www.tipcoasphalt.com/investor-relations/publications/annual-report-56-1-one-report/>)

The summary of Ordinary business support transaction with general commercial condition were as follows:

Unit: THB Million		Related Companies, Details and Amount	2020	2021	Pricing Policy
Sales and Services Provided to	Asia Bitumen Trading Pte Ltd.	Sales - Asphalt Cement	1,565	367	Market price/ Contract price
	Phoenix Asphalt Philippines Inc.	Sales - Asphalt Cement	157	308	
	Thanomwongse Service Company Limited	Sales - Asphalt Cement, oil and provide services	81	6	
	Thai Slurry Seal Company Limited	Sales - Asphalt Cement, oil and provide services	109	8	
	Colas S.A. (Colas S.A. Sami Bitumen Technology and Hindustan Colas)	Sales - Asphalt Cement and provide services	1,300	1,866	
	Siam Container Transport and Terminal Co., Ltd.	Provide services	2	2	
	Tipco Tower Company Limited	Provide services	1	1	
	Marketing Consultant Company Limited	Provide services	-	2	
	Nawarat Patanakarn Public Company Limited (Other joint operator)	Sales - Asphalt cement and oil and provide service and revenue from construction contract	-	114	
	Hadyai Rueang Chai Construction Ltd., Part. (Other joint operator)	Sales - Asphalt Cement and revenue from construction contract	-	33	
	ISCO Industry PTE	Sales - Aqua Quick	6	-	
Continental Bitumen Limited	Sale - Asphalt Cement	-	153		
Total Revenues			3,221	2,869	
Rental and Service Expenses Paid to	Siam Container Transport and Terminal Co., Ltd	Service - Transportation & Customs Clearance	4	5	Market price/ Contract price
	Tipco F&B Co., Ltd.	Other services	2	3	
	Tipco Tower Company Limited	Rental office and other services	35	38	
	Marketing Consultant Co., Ltd.	Other services	1	1	
	PT SARANA DISTRIBUSI ASPHALT NUSANTARA	Other services	-	3	
	Colas S.A.	Other services	43	40	
	Ruamsupsin Co., Ltd.	Other services	1	4	
SubTotal			86	94	
Technical Assistance Fee Expenses Paid to	Colas S.A.	Technical assistance fee	42	42	Contract price
Total Expenses			128	136	

Connected transactions with Tipco Tower Co.,Ltd.

The Company reviewed its leasing contract for the use of its office rental from 1st January 2022 – 31st December 2024 with Tipco Tower Co. Ltd., which boasts full facilities, a reasonable renting price and continued business operations. Transactions with the Tipco tower Co., Ltd., which has common directors with the Group, followed general conditions and were based on market prices with no transfer of benefit.

Connected transactions with Thai Slurry Seal Co., Ltd.

The Company increased its shareholding from 25% to 62.5% of total of issued and paid-up shares of Thai Slurry Seal Co. Ltd., engaged in road construction and maintenance services. Transactions with Thai Slurry Seal Co., Ltd., which has common directors with the Group, will enable the Company to increase its involvement in the road construction and maintenance business. In addition, the transaction will increase future business potential and support the mission and vision of the Company. The Board of Directors meeting considered the offering price and deemed it both reasonable and beneficial to the Company and the Company's shareholders.

Notification to SET: <https://www.set.or.th/set/pdfnews.do?newsId=16110997983460&sequence=2021006412>

REPORT OF THE BOARD OF DIRECTORS' RESPONSIBILITIES FOR FINANCIAL STATEMENTS

The Company's Board of Directors is responsible for the consolidated and separate financial statements of Tipco Asphalt Public Company Limited and other financial information appears in the 56-1 One Report in accordance with the Public Company Limited Act of 1992, the Securities and Exchange Act of 1992, and the announcement of the Capital Market Supervisory Board concerning the criteria, conditions, and reporting method for the disclosure of information on financial status and performance of companies that issue securities.

The financial statements are prepared in accordance with Thai Financial Reporting Standards and free from material misstatement, whether due to fraud or error, while the Accounting Policies are selected for their appropriateness and consistently implemented. The financial statements are also prepared with careful considerations and best possible estimates while significant information is sufficiently and transparently disclosed in the notes for the benefits of shareholders and other investors.

The Board of Directors had appointed the Audit Committee, comprised of independent directors whose qualifications are in accordance with requirements of the Stock Exchange of Thailand, to review the accuracy and sufficiency of the Company's financial reports and the disclosures of related transactions and the adequacy and efficiency of internal control system. Opinion of the Audit Committee is reported in the Audit Committee's report published in this 56-1 One Report.

The Board of Directors is of opinion that the consolidated and separate financial statements of the Company ended 31st December 2021, of which audited by the external auditor and jointly reviewed by the Audit Committee and Management, had presented fairly, in all material respects, the financial position and financial performance in accordance with Thai Financial Reporting Standards.



(Mr. Chainoi Puankosoom)
Chairman



(Mr. Chaiwat Srivalwat)
Chief Executive Officer

Part 3 :

Financial Statements and Attachments

134 Financial Statements

218 Attachment 1: Details of directors, executives, controlling persons, the person assigned to take the highest responsibility in Accounting and Finance, the person assigned to take direct responsibility for accounting supervision, the Company's secretary and the representative for contact and coordination in case of a foreign company

241 Attachment 2: Details of the directors of subsidiaries

242 Attachment 3: Details of the Heads of the Internal Audit and Compliance Units

243 Attachment 4: Assets for business undertaking and details of asset appraisal

246 Attachment 5: Unabridged policy and guidelines on corporate governance and unabridged code of business conduct

Independent Auditor's Report

Independent Auditor's Report

To the Shareholders of Tipco Asphalt Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Tipco Asphalt 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 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 Tipco Asphalt Public Company Limited (the Company) for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Tipco Asphalt Public Company Limited and its subsidiaries and of Tipco Asphalt 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.

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 for each matter are described below.

Valuation of commodity forward contracts

As discussed in Notes 4 and 33 to the consolidated financial statements, the Group has entered into derivatives to protect the exposure from the fluctuation in price of commodities, with many counterparties, and presented the fair value of such derivatives in the financial statements. Management therefore relied on a valuation technique and model suggested by expert, in which the assumptions used in the model were based on comparable and observable market inputs. The difference in assumption used in calculation affected the fair value of such derivatives presented in the financial statements.

I gained an understanding of the transaction and recording process of fair value of commodity forward contracts. I recalculated the fair value of such commodity forward contracts. I sent the confirmations to counterparties to determine the completeness of transaction and verified supporting documents, on a sampling basis, for actual transactions occurring during the year and after the period-end. In addition, I tested the appropriateness of fair value used by comparing to the counterparties' information and available market inputs. Moreover, I examined the information disclosed in notes to the consolidated financial statements for appropriateness and completeness.

Business combination

As discussed in Note 11 to the consolidated financial statements, in February 2021, the Group increased its shareholding in Thai Slurry Seal Company Limited. During the current year, the Group completed the assessment of the fair value of such company's identifiable assets acquired and liabilities assumed as at the acquisition date. I have focused on this increase in the shareholding since it is material to the financial statements as a whole, and management was required to exercise substantial judgement when appraising the fair value of the identifiable assets acquired and liabilities assumed. Therefore, there is a risk with respect to the recognition and measurement of the identifiable assets acquired and liabilities assumed, including recognition of goodwill.

I reviewed the terms and conditions of the share sale and purchase agreement and inquired of management as to the nature and objectives of the acquisition in order to determine whether the increase in shareholding meets the definition of a business combination under Thai Financial Reporting Standard 3 Business Combinations. In addition, I checked the value of the increase in shareholding to supporting documents related to the share purchase to ensure that it corresponds to the fair value of the consideration transferred and tested the calculation of the fair value of the identifiable assets acquired and liabilities assumed using the purchase price allocation method. I also reviewed the appropriateness of the significant methods and assumptions used by an independent valuation specialist in calculating the fair value of the assets and evaluated the expertise, ability and integrity of the independent valuation specialist. I tested the calculation and reviewed the rationale of the goodwill recorded by the Group, and reviewed the completeness and accuracy of the disclosures related to the increase in shareholding in the notes to the consolidated financial statements.

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.



Krongkaew Limkittikul
Certified Public Accountant (Thailand) No. 5874

EY Office Limited
Bangkok: 10 February 2022

Tipco Asphalt 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		1,540,617,230	1,887,763,120	271,318,056	568,507,669
Trade and other receivables	6, 7	4,236,717,655	3,352,411,242	2,886,098,893	2,919,634,119
Contract assets	8	872,860,668	-	-	-
Advances to subcontractors		304,591,265	-	-	-
Short-term loans to related parties	7	25,226,121	127,000,000	110,000,000	265,000,000
Inventories	9	6,370,552,623	5,382,848,520	5,173,512,611	4,775,366,439
Derivative - commodity forward contracts	33	154,581,742	140,293,081	154,581,742	140,293,081
Other current assets		378,595,091	223,831,633	45,910,271	50,249,053
		<u>13,883,742,395</u>	<u>11,114,147,596</u>	<u>8,641,421,573</u>	<u>8,719,050,361</u>
Assets held for sale	10	446,235,018	-	-	-
Total current assets		<u>14,329,977,413</u>	<u>11,114,147,596</u>	<u>8,641,421,573</u>	<u>8,719,050,361</u>
Non-current assets					
Investments in subsidiaries	11	-	-	8,315,283,014	7,717,239,560
Investments in joint ventures	12	132,567,628	124,036,527	67,552,611	67,552,611
Investments in associates	13	479,190,367	659,731,450	18,403,580	243,447,034
Derivative - commodity forward contracts	33	33,720,679	3,940,267	33,720,679	3,940,267
Long-term loans to related parties	7	-	-	675,244,405	1,305,671,253
Investment properties	14	189,032,559	189,032,559	94,342,234	94,342,234
Property, plant and equipment	15	8,250,196,593	8,155,782,795	846,238,620	923,556,056
Right-of-use assets	20	728,649,714	559,220,279	102,748,737	127,353,103
Goodwill	11	195,932,109	146,293,504	-	-
Intangible assets	16	266,384,079	158,359,646	32,205,154	50,104,194
Deferred tax assets	26	177,023,897	208,272,062	108,470,849	172,766,564
Other non-current assets		18,226,988	15,640,897	4,032,717	4,226,625
Total non-current assets		<u>10,470,924,613</u>	<u>10,220,309,986</u>	<u>10,298,242,600</u>	<u>10,710,199,501</u>
Total assets		<u>24,800,902,026</u>	<u>21,334,457,582</u>	<u>18,939,664,173</u>	<u>19,429,249,862</u>

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt 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	17	3,415,910,559	1,540,412,467	3,096,246,795	1,451,764,316
Trade and other payables	7, 18	3,107,027,194	3,031,597,848	4,145,228,861	4,835,908,082
Short-term loans from related parties	7	-	-	80,000,000	-
Contract liabilities	8	665,845,150	-	-	-
Current portion of liabilities					
Long-term loan from financial institution		-	36,550,228	-	-
Lease liabilities	20	107,742,260	62,041,408	25,237,609	26,928,707
Derivative - commodity forward contracts	33	234,032,207	562,559,740	234,032,207	562,559,740
Income tax payable		115,019,489	581,592,977	69,711,225	428,528,352
Other current liabilities		254,511,284	103,689,699	17,964,912	2,333,678
Total current liabilities		7,900,088,143	5,918,444,367	7,668,421,609	7,308,022,875
Non-current liabilities					
Long-term loan from related party	7	7,718,529	6,789,489	-	-
Long-term liabilities - net of current portion					
Lease liabilities	20	315,896,929	218,477,045	79,764,486	100,097,983
Derivative - commodity forward contracts	33	-	3,721,597	-	3,721,597
Deferred tax liabilities	26	393,033,973	-	-	-
Provision for long-term employee benefits	21	246,882,196	166,385,959	145,856,344	114,115,455
Total non-current liabilities		963,531,627	395,374,090	225,620,830	217,935,035
Total liabilities		8,863,619,770	6,313,818,457	7,894,042,439	7,525,957,910

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt 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
Shareholders' equity					
Share capital	22				
Registered					
1,578,361,570 ordinary shares (2020: 1,579,883,570 ordinary shares) of Baht 1 each		<u>1,578,361,570</u>	<u>1,579,883,570</u>	<u>1,578,361,570</u>	<u>1,579,883,570</u>
Issued and fully paid					
1,578,361,570 ordinary shares of Baht 1 each		1,578,361,570	1,578,361,570	1,578,361,570	1,578,361,570
Premium on share capital		1,152,388,500	1,152,388,500	1,152,388,500	1,152,388,500
Non-controlling interests of subsidiary acquired by the Company at price lower than book value		6,237,755	6,237,755	-	-
Change in the Company's interest in subsidiaries which did not result in a loss of control		(570,310,802)	(570,310,802)	-	-
Capital reserve for share-based payment transactions		174,753,421	174,753,421	174,753,421	174,753,421
Retained earnings					
Appropriated - statutory reserve	23	172,123,329	172,123,329	172,123,329	172,123,329
Unappropriated		13,285,766,211	13,545,642,150	7,995,603,112	8,915,797,098
Other components of shareholders' equity		<u>(431,366,985)</u>	<u>(1,221,847,455)</u>	<u>(27,608,198)</u>	<u>(90,131,966)</u>
Equity attributable to owners of the Company		<u>15,367,952,999</u>	<u>14,837,348,468</u>	<u>11,045,621,734</u>	<u>11,903,291,952</u>
Non-controlling interests of the subsidiaries		<u>569,329,257</u>	<u>183,290,657</u>	<u>-</u>	<u>-</u>
Total shareholders' equity		<u>15,937,282,256</u>	<u>15,020,639,125</u>	<u>11,045,621,734</u>	<u>11,903,291,952</u>
Total liabilities and shareholders' equity		<u>24,800,902,026</u>	<u>21,334,457,582</u>	<u>18,939,664,173</u>	<u>19,429,249,862</u>

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt 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 or loss:					
Revenues					
Sales and service income		24,447,114,947	26,155,271,615	21,429,750,278	22,943,386,493
Revenues from construction contracts		2,605,664,633	-	-	-
Other income					
Dividend income from subsidiaries	11	-	-	187,480,548	226,700,970
Dividend income from associate	13	-	-	85,505,033	57,728,345
Gain on exchange		90,286,944	76,854,974	4,538,177	33,633,053
Others		133,595,246	123,284,476	141,858,267	120,340,448
Total revenues		27,276,661,770	26,355,411,065	21,849,132,303	23,381,789,309
Expenses					
Cost of sales and services		19,723,431,299	21,402,594,494	18,032,740,798	20,243,153,152
(Gain) loss from commodity forward contracts	33	1,048,417,215	(802,628,920)	1,048,417,215	(813,350,894)
Reduction of cost of inventories to net realisable value (reversal)	9	(3,885,676)	626,711	10,969	(5,379,027)
		20,767,962,838	20,600,592,285	19,081,168,982	19,424,423,231
Cost of construction		2,403,260,487	-	-	-
Selling expenses		169,822,267	169,111,338	95,113,197	114,161,338
Administrative expenses		1,184,005,519	1,209,277,202	729,399,504	752,758,758
Other expenses					
Impairment loss on investment properties and property, plant and equipment	14, 15	37,972,693	74,173,115	-	6,273,115
Insurance claim - net of damages and expenses from a fire	24	(270,647,162)	(109,893,166)	-	-
Total expenses		24,292,376,642	21,943,260,774	19,905,681,683	20,297,616,442
Profit from operating activities		2,984,285,128	4,412,150,291	1,943,450,620	3,084,172,867
Share of profit (loss) from investments in joint ventures	12	(1,221,883)	9,248,936	-	-
Share of profit from investments in associates	13	129,648,604	109,074,247	-	-
Finance income		23,490,250	12,429,665	28,656,733	38,628,057
Finance cost		(118,121,817)	(130,870,402)	(88,703,292)	(89,050,219)
Expected credit losses	6	(33,454,061)	(57,192,359)	(14,251,699)	(7,876,473)
Remeasurement gain on business combination	11	20,748,366	-	-	-
Profit before income tax		3,005,374,587	4,354,840,378	1,869,152,362	3,025,874,232
Income tax	26	(753,416,563)	(757,339,648)	(315,570,600)	(539,811,504)
Profit for the year		2,251,958,024	3,597,500,730	1,553,581,762	2,486,062,728

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt Public Company Limited and its subsidiaries

Statement of comprehensive income (continued)
For the year ended 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
Other comprehensive income:					
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>					
Exchange differences on translation of financial statements in foreign currencies		744,119,888	(4,935,125)	-	-
Gain on cash flow hedges - net of income tax	26, 33	<u>62,523,768</u>	<u>67,499,155</u>	<u>62,523,768</u>	<u>67,499,155</u>
Other comprehensive income to be reclassified to profit or loss in subsequent periods - net of income tax		<u>806,643,656</u>	<u>62,564,030</u>	<u>62,523,768</u>	<u>67,499,155</u>
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>					
Actuarial loss - net of income tax	21, 26	(34,222,353)	(698,237)	(27,422,621)	-
Share of other comprehensive income in associate - net of income tax		(2,348,000)	-	-	-
Gain on changes in value of equity investments designated at fair value through other comprehensive income - net of income tax		<u>1,267,000</u>	<u>-</u>	<u>-</u>	<u>-</u>
Other comprehensive income not to be reclassified to profit or loss in subsequent periods - net of income tax		<u>(35,303,353)</u>	<u>(698,237)</u>	<u>(27,422,621)</u>	<u>-</u>
Other comprehensive income for the year		<u>771,340,303</u>	<u>61,865,793</u>	<u>35,101,147</u>	<u>67,499,155</u>
Total comprehensive income for the year		<u>3,023,298,327</u>	<u>3,659,366,523</u>	<u>1,588,682,909</u>	<u>2,553,561,883</u>
Profit attributable to:					
Equity holders of the Company		2,219,712,251	3,591,824,102	<u>1,553,581,762</u>	<u>2,486,062,728</u>
Non-controlling interests of the subsidiaries		<u>32,245,773</u>	<u>5,676,628</u>		
		<u>2,251,958,024</u>	<u>3,597,500,730</u>		
		-	-		
Total comprehensive income attributable to:				<u>1,588,682,909</u>	<u>2,553,561,883</u>
Equity holders of the Company		2,976,957,658	3,647,507,371	<u>1,588,682,909</u>	<u>2,553,561,883</u>
Non-controlling interests of the subsidiaries		<u>46,340,669</u>	<u>11,859,152</u>		
		<u>3,023,298,327</u>	<u>3,659,366,523</u>		
		-	-		
Earnings per share	29				
Basic earnings per share					
Profit attributable to equity holders of the Company		<u>1.41</u>	<u>2.28</u>	<u>0.98</u>	<u>1.58</u>

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt 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 owners of the Company											
	Issued and paid-up share capital	Premium on share capital	Share subscription	Non-controlling interests of subsidiary acquired by the Company at price lower than book value	Change in the Company's interest in subsidiaries which did not result in a loss of control	Capital reserve for share-based payment transactions	Retained earnings	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	
Balance as at 1 January 2020	1,576,763,070	1,140,287,855	2,571,000	6,237,755	(570,310,802)	174,753,421	12,162,725,183	(1,278,228,961)	13,386,921,850	171,431,535	13,558,353,385	
Profit for the year	-	-	-	-	-	-	3,591,824,102	56,381,506	3,591,824,102	5,676,628	3,597,500,730	
Other comprehensive income for the year	-	-	-	-	-	-	(698,237)	56,381,506	55,683,269	6,182,524	61,865,793	
Total comprehensive income for the year	-	-	-	-	-	-	3,591,125,865	56,381,506	3,647,507,371	11,859,152	3,659,366,523	
Warrant holders exercised warrants	1,598,500	12,100,645	(2,571,000)	-	-	-	-	-	11,128,145	-	11,128,145	
Dividend paid (Note 31)	-	-	-	-	-	-	(2,208,208,898)	-	(2,208,208,898)	-	(2,208,208,898)	
Dividend paid to non-controlling interests of subsidiaries	-	-	-	-	-	-	-	-	-	(30)	(30)	
Balance as at 31 December 2020	1,578,361,570	1,152,388,500	-	6,237,755	(570,310,802)	174,753,421	13,545,642,150	(1,221,847,455)	14,837,348,468	183,290,657	15,020,639,125	
Balance as at 1 January 2021	1,578,361,570	1,152,388,500	-	6,237,755	(570,310,802)	174,753,421	13,545,642,150	(1,221,847,455)	14,837,348,468	183,290,657	15,020,639,125	
Profit for the year	-	-	-	-	-	-	2,219,712,251	-	2,219,712,251	32,245,773	2,251,958,024	
Other comprehensive income for the year	-	-	-	-	-	-	(31,678,938)	788,924,345	757,245,407	14,094,896	771,340,303	
Total comprehensive income for the year	-	-	-	-	-	-	2,188,033,313	788,924,345	2,976,957,658	46,340,669	3,023,298,327	
Change in non-controlling interests of a subsidiary from business combination (Note 11)	-	-	-	-	-	-	-	-	-	339,698,033	339,698,033	
Dividend paid (Note 31)	-	-	-	-	-	-	-	-	(2,446,353,127)	-	(2,446,353,127)	
Dividend paid to non-controlling interests of subsidiaries	-	-	-	-	-	-	-	-	-	(102)	(102)	
Transfer to retained earnings	-	-	-	-	-	-	(1,556,125)	1,556,125	-	-	-	
Balance as at 31 December 2021	1,578,361,570	1,152,388,500	-	6,237,755	(570,310,802)	174,753,421	13,285,766,211	(431,366,985)	15,367,952,999	569,329,257	15,937,282,256	

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)
For the year ended 31 December 2021

Other components of shareholders' equity are as follows:

	Consolidated financial statements (continued)					(Unit: Baht)
	Other components of shareholders' equity					
	Exchange differences on translation of financial statements in foreign currencies	Fair value reserve	Share of other comprehensive income in associate	Cash flow hedge reserve	Total	
Balance as at 1 January 2020	(1,120,597,840)	-	-	(157,631,121)	(1,278,228,961)	
Other comprehensive income for the year	(11,117,649)	-	-	67,499,155	56,381,506	
Balance as at 31 December 2020	(1,131,715,489)	-	-	(90,131,966)	(1,221,847,455)	
Balance as at 1 January 2021	(1,131,715,489)	-	-	(90,131,966)	(1,221,847,455)	
Other comprehensive income for the year	727,956,702	791,875	(2,348,000)	62,523,768	788,924,345	
Transfer to retained earnings	-	(791,875)	2,348,000	-	1,556,125	
Balance as at 31 December 2021	(403,758,787)	-	-	(27,608,198)	(431,366,985)	

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)
For the year ended 31 December 2021

(Unit: Baht)

	Separate financial statements									
	Issued and paid-up share capital	Premium on share capital	Share subscription	Capital reserve for share-based payment transactions	Retained earnings		Other components of shareholders' equity			Total shareholders' equity
					Appropriated statutory reserve	Unappropriated reserve	Income	Cash flow hedge reserve	Total other components of shareholders' equity	
Balance as at 1 January 2020	1,576,763,070	1,140,287,855	2,571,000	174,753,421	172,123,329	8,637,943,268	(157,631,121)	(157,631,121)	11,546,810,822	
Profit for the year	-	-	-	-	-	2,486,062,728	-	-	2,486,062,728	
Other comprehensive income for the year	-	-	-	-	-	-	67,499,155	67,499,155	67,499,155	
Total comprehensive income for the year	-	-	-	-	-	2,486,062,728	67,499,155	67,499,155	2,553,561,883	
The warrant holders exercise warrants	1,598,500	12,100,645	(2,571,000)	-	-	-	-	-	11,128,145	
Dividend paid (Note 31)	-	-	-	-	-	(2,208,208,898)	-	-	(2,208,208,898)	
Balance as at 31 December 2020	<u>1,578,361,570</u>	<u>1,152,388,500</u>	-	<u>174,753,421</u>	<u>172,123,329</u>	<u>8,915,797,098</u>	<u>(90,131,966)</u>	<u>(90,131,966)</u>	<u>11,903,291,952</u>	
Balance as at 1 January 2021	1,578,361,570	1,152,388,500	-	174,753,421	172,123,329	8,915,797,098	(90,131,966)	(90,131,966)	11,903,291,952	
Profit for the year	-	-	-	-	-	1,553,581,762	-	-	1,553,581,762	
Other comprehensive income for the year	-	-	-	-	-	(27,422,621)	62,523,768	62,523,768	35,101,147	
Total comprehensive income for the year	-	-	-	-	-	1,526,159,141	62,523,768	62,523,768	1,588,682,909	
Dividend paid (Note 31)	-	-	-	-	-	(2,446,353,127)	-	-	(2,446,353,127)	
Balance as at 31 December 2021	<u>1,578,361,570</u>	<u>1,152,388,500</u>	-	<u>174,753,421</u>	<u>172,123,329</u>	<u>7,995,603,112</u>	<u>(27,608,198)</u>	<u>(27,608,198)</u>	<u>11,045,621,734</u>	

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt Public Company Limited and its subsidiaries

Cash flow statement

For the year ended 31 December 2021

(Unit: Baht)

	<u>Consolidated financial statements</u>		<u>Separate financial statements</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Cash flows from operating activities:				
Profit before income tax	3,005,374,587	4,354,840,378	1,869,152,362	3,025,874,232
Adjustments to reconcile profit before income tax to net cash provided by (paid from) operating activities:				
Depreciation and amortisation	1,236,662,897	1,050,468,103	238,882,916	257,671,709
Written off withholding tax	9,247,182	20,296	-	-
Expected credit losses	33,454,061	57,192,359	14,251,699	7,876,473
Reduction of cost of inventories to net realisable value (reversal)	(3,885,676)	626,711	10,969	(5,379,027)
Impairment loss on investment properties and property, plant and equipment	37,972,693	74,173,115	-	6,273,115
Written off right-of-use assets	2,051,120	-	2,051,120	-
Dividend income from subsidiaries	-	-	(187,480,548)	(226,700,970)
Dividend income from associate	-	-	(85,505,033)	(57,728,345)
Unrealised (gain) loss on exchange	80,500,459	(22,841,069)	46,700,256	(42,572,108)
Gain on sales of equipment	(18,525,454)	(16,939,731)	(11,287,982)	(16,150,339)
Remeasurement gain on business combination	(20,748,366)	-	-	-
Share of (profit) loss from investments in joint ventures	1,221,883	(9,248,936)	-	-
Share of profit from investments in associates	(129,648,604)	(109,074,247)	-	-
Provision for long-term employee benefits	19,030,953	19,979,494	15,342,139	11,772,370
Change in fair value of forward exchange contracts	3,223,795	(6,094,465)	3,806,990	(1,149,032)
Change in fair value of commodity forward contracts	(298,163,492)	90,680,616	(298,163,492)	90,680,616
Finance income	(23,490,250)	(12,429,665)	(28,656,733)	(38,628,057)
Finance cost	74,929,951	119,186,940	62,852,190	83,885,829
Profit from operating activities before changes in operating assets and liabilities	4,009,207,739	5,590,539,899	1,641,956,853	3,095,726,466
(Increase) decrease in operating assets				
Trade and other receivables	(658,970,241)	1,790,456,322	28,104,886	1,960,569,081
Contract assets	(195,876,475)	-	-	-
Advances to subcontractors	(66,383,632)	-	-	-
Inventories	(903,742,841)	2,083,505,109	(398,157,141)	1,838,250,146
Other current assets	(194,952,719)	(24,436,904)	(50,299,854)	(83,665,921)
Other non-current assets	(3,150,810)	4,891,508	31,966	609,261
Increase (decrease) in operating liabilities				
Trade and other payables	(352,609,352)	(3,265,608,150)	(144,081,835)	(2,143,928,655)
Contract liabilities	(35,182,947)	-	-	-
Other current liabilities	55,562,891	(2,911,367)	13,255,723	(295,984)
Other non-current liabilities	(25,216,419)	(19,850,578)	(17,879,525)	(16,838,714)
Cash flows from operating activities	1,628,685,194	6,156,585,839	1,072,931,073	4,650,425,680
Cash paid for corporate income tax	(884,370,352)	(603,668,752)	(618,867,299)	(462,581,277)
Net cash flows from operating activities	744,314,842	5,552,917,087	454,063,774	4,187,844,403

The accompanying notes are an integral part of the financial statements.

Tipco Asphalt Public Company Limited and its subsidiaries

Cash flow statement (continued)
For the year ended 31 December 2021

(Unit: Baht)

	<u>Consolidated financial statements</u>		<u>Separate financial statements</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Cash flows from investing activities:				
Cash paid for investment in subsidiary - net from cash and cash equivalent received	(194,957,661)	-	(373,000,000)	-
Dividend received from subsidiaries	-	-	187,480,548	226,700,970
Dividend received from an associate	85,505,033	57,728,345	85,505,033	57,728,345
(Increase) decrease in short-term loans to related parties	101,773,879	(127,000,000)	155,000,000	(142,000,000)
Decrease in long-term loans to related parties	-	-	50,072,737	30,002,500
Cash receipt from interest	23,464,628	12,366,714	5,868,686	30,844,884
Acquisition and cash paid to settle payables from purchases of equipment	(500,200,483)	(698,370,819)	(57,370,702)	(84,036,816)
Cash paid for acquisitions of computer software	(10,975,449)	(8,731,817)	(6,224,531)	(5,684,958)
Proceeds from sales of equipment	26,889,734	23,847,423	13,618,260	19,168,581
Net cash flows from (used in) investing activities	(468,500,319)	(740,160,154)	60,950,031	132,723,506
Cash flows from financing activities:				
Increase (decrease) in short-term loans from financial institutions	1,846,670,492	(2,468,038,152)	1,644,482,478	(2,264,338,793)
Increase (decrease) in short-term loans from related parties	(39,193,713)	-	80,000,000	(160,000,000)
Payment of principal of lease liabilities	(92,722,560)	(99,369,212)	(28,503,738)	(26,602,336)
Repayment of long-term loan	(39,539,500)	(38,862,600)	-	-
Cash receipts from increase in capital	-	11,128,145	-	11,128,145
Dividend paid to shareholders	(2,445,919,651)	(2,207,875,621)	(2,445,919,651)	(2,207,875,621)
Dividend paid to non-controlling interests of subsidiaries	(102)	(30)	-	-
Interest paid	(77,723,374)	(107,568,615)	(62,262,507)	(81,984,737)
Net cash flows used in financing activities	(848,428,408)	(4,910,586,085)	(812,203,418)	(4,729,673,342)
Exchange differences on translation of financial statements in foreign currencies				
	225,467,995	(13,824,826)	-	-
Net decrease in cash and cash equivalents	(347,145,890)	(111,653,978)	(297,189,613)	(409,105,433)
Cash and cash equivalents at beginning of year	1,887,763,120	1,999,417,098	568,507,669	977,613,102
Cash and cash equivalents at end of year	1,540,617,230	1,887,763,120	271,318,056	568,507,669

Supplemental cash flows information

Non-cash transactions

Acquisitions of equipment for which cash has not been paid	39,249,629	18,451,987	-	-
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The accompanying notes are an integral part of the financial statements.

1. General information

1.1 General information of the Company

Tipco Asphalt Public Company Limited (“the Company”) is a public company incorporated and domiciled in Thailand. The major shareholders of the Company are Supsakorn family and Colas Group, a company incorporated in French Republic. The Company is principally engaged in the manufacture and distribution of asphalt and petroleum products and its registered address is 118/1 Rama 6 Road, Phayathai Sub district, Phayathai District, Bangkok.

1.2 Coronavirus disease 2019 pandemic

The Coronavirus disease 2019 pandemic is adversely impacting most businesses and industries. This situation may bring uncertainties and have an impact on the environment in which the Group operates. The Group’s management has continuously monitored ongoing developments and assessed the financial impact in respect of the valuation of assets, provisions and contingent liabilities, 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 the Company and the following subsidiaries:

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2021 (Million Baht)	2020 (Million Baht)	2021 (%)	2020 (%)
<u>Subsidiaries incorporated in Thailand</u>					
Raycol Asphalt Co., Ltd.	Manufacture and distribution of asphalt products	111	111	100.00	100.00
Thai Bitumen Co., Ltd.	Manufacture and distribution of asphalt products	375	375	99.99	99.99
Tipco Maritime Co., Ltd.	Shipping management and agency	2	2	99.99	99.99
Alpha Maritime Co., Ltd.	Marine transportation	143	143	99.99	99.99
Bitumen Marine Co., Ltd.	Marine transportation	150	150	99.99	99.99
Ravana 1020 Co., Ltd. (formerly known as Delta Shipping Co., Ltd.)	Distribution of machine, materials and tools relating to road construction (formerly engaged in marine transportation)	80	80	99.99	99.99
Tasco Shipping Co., Ltd.	Marine transportation	290	290	99.99	99.99
Thai Slurry Seal Co., Ltd. (Thai Slurry Seal)*	Road rehabilitation services and sales of construction materials	243	243	62.5	25.00
Thanomwongse Service Co., Ltd. (100% owned by Thai Slurry Seal)	Construction service and sales of construction materials	791	791	62.5	25.00

* During the current year, Thai Slurry Seal's status was changed from an associate to a subsidiary as described in Note 11 to the consolidated financial statements.

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2021	2020	2021	2020
<u>Subsidiaries incorporated in Malaysia</u>					
Kemaman Oil Corporation Sdn Bhd ("KOC")	Holding company and manufacture and distribution of asphalt and petroleum products	151.96 Million MYR	151.96 Million MYR	100.00	100.00
Kemaman Bitumen Company Sdn Bhd ("KBC")	Manufacture and distribution of asphalt and petroleum products	305.55 Million MYR	305.55 Million MYR	100.00	100.00
KBC Trading Sdn Bhd (10% owned by the Company and 20% owned by KOC)	Distribution of asphalt products	0.30 Million MYR	0.30 Million MYR	30.00	30.00
<u>Subsidiaries incorporated in Singapore</u>					
Pacific Bitumen Shipping Pte. Ltd.	Marine transportation	0.04 Million USD	0.04 Million USD	100.00	100.00
Highway Resources Pte. Ltd. ("HR")	Holding company	4.78 Million SGD	4.78 Million SGD	100.00	100.00
Highway Resources Trading Pte. Ltd. (100% owned by HR)	Dormant	0.01 Million USD	0.01 Million USD	100.00	100.00
AD Shipping Pte. Ltd.	Marine transportation	7.13 Million SGD	7.13 Million SGD	100.00	100.00

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2021	2020	2021 (%)	2020 (%)
Reta Link Pte. Ltd.	Marine transportation	0.05 Million SGD	0.05 Million SGD	100.00	100.00
<u>Subsidiary incorporated in Vietnam</u>					
Asphalt Distribution Co., Ltd. (100% owned by HR)	Manufacture and distribution of asphalt products	115,650 Million VND	115,650 Million VND	100.00	100.00
<u>Subsidiaries incorporated in Indonesia</u>					
PT Asphalt Bangun Sarana ("ABS")	Manufacture and distribution of asphalt products	58,450 Million IDR	58,450 Million IDR	99.99	99.99
PT Saranaraya Reka Cipta (99.90% owned by ABS)	Manufacture and distribution of asphalt products	10,477 Million IDR	10,477 Million IDR	99.89	99.89
<u>Subsidiary incorporated in Cambodia</u>					
Tipco Asphalt (Cambodia) Co., Ltd.	Manufacture and distribution of asphalt products	20.00 Million Riel	20.00 Million Riel	100.00	100.00
<u>Subsidiary incorporated in Hong Kong</u>					
Tasco International (Hong Kong) Ltd. ("TIHK")	Holding company	97.97 Million HKD	97.97 Million HKD	100.00	100.00

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2021	2020	2021	2020
<u>Subsidiaries incorporated in China (owned by TIHK)</u>					
Langfang Tongtai Road Material Co., Ltd.	Manufacture and distribution of asphalt products	2.10 Million USD	2.10 Million USD	51.00 (%)	51.00 (%)
Zhenjiang Tipco Asphalt Co., Ltd.	Manufacture and distribution of asphalt products	20.00 Million RMB	20.00 Million RMB	51.00	51.00
Tipco Asphalt (Xinhui) Co., Ltd.	Manufacture and distribution of asphalt products	30.00 Million RMB	30.00 Million RMB	100.00	100.00
Guangzhou Tipco Asphalt Trading Co., Ltd.	Distribution of asphalt products	6.00 Million RMB	6.00 Million RMB	100.00	100.00
<u>Subsidiary incorporated in Lao People's Democratic Republic</u>					
Tipco Asphalt Lao Co., Ltd.	Manufacture and distribution of asphalt products	26,675 Million LAK	26,675 Million LAK	75.00	75.00

- 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 as from 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 those of the Company.
- e) The assets and liabilities in the financial statements of overseas subsidiary companies are translated to Baht using the exchange rates prevailing on the end of reporting period, and revenues and expenses translated using monthly average exchange rates. The resulting differences are shown under the caption of “Exchange differences on translation of financial statements in foreign currencies” in the statement of changes in shareholders’ equity.
- f) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.
- g) 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 present investments in subsidiaries, joint ventures and associates under the cost method.
- 2.4 The Group has interests in joint operations which are joint arrangements whereby the Group has rights to assets and obligations relating to the joint arrangements. The Group recognises assets, liabilities, revenues and expenses in relation to its interest in the following joint operations in the consolidated and separate financial statements from the date that joint control commences until the date that joint control ceases.

Company's name	Nature of business	Country of incorporation	Percentage of shareholding
TN Joint Venture	Construction service	Thailand	51.61
TN-CEI Joint Venture	Construction service	Thailand	51.00
TH Joint Venture	Construction service	Thailand	51.00
NTH Joint Venture	Construction service	Thailand	23.50

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.

3.2 Financial reporting standards that became 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 believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Significant accounting policies

4.1 Revenue recognition

Sales of goods

Revenue from sale of goods is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods. Revenue is measured at the amount of the consideration received or receivable, excluding value added tax, of goods supplied after deducting returns and discounts to customers.

Revenues from construction contracts

The Group has determined that its construction contracts generally have one performance obligation. The Group recognises construction revenue over time where the stage of completion is measured using an input method, based on comparison of actual construction costs incurred up to the end of the period and total anticipated construction costs at completion.

The likelihood of contract variations claims and liquidated damages, delays in delivery or contractual penalties are taken into account in determining the revenue to be recognised, such that revenue is only recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

When the value and stage of completion of the contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

Rendering of services

Service revenue is recognised over time when services have been rendered taking into account the stage of completion.

Vessel operating income consists of time charters and voyage charters. Income from time charters is recognised when the right to use a vessel is transferred to a lessee for an agreed period of time, while income from voyage charters is recognised by reference to the stage of completion.

Costs of construction

Costs of construction services consist of costs of materials, labour, sub-contractors, services and other expenses.

Costs of construction are recognised in accordance with satisfied performance obligations in the contract when incurred. Provision for anticipated losses on projects is made in the accounts in full when the possibility of loss is ascertained.

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 right to receive the dividends is established.

4.2 Balances of contracts with customers

Contract assets

A contract asset is the excess of cumulative revenue earned over the billings to date. Allowance for impairment loss is provided for the estimated losses that may be incurred in customer collection. Contract assets are transferred to receivables when the rights become unconditional.

Contract liabilities

A contract liability is recognised when the billings to date exceed the cumulative revenue earned and the Group has an obligation to transfer services to its customer. Contract liabilities are recognised as revenue when the Group fulfils its performance obligations under the contracts.

4.3 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand, cash at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

4.4 Inventories

Finished goods and work in process are valued at the lower of cost determined under the weighted average cost method and net realisable value. Cost of finished goods includes all production costs and attributable factory overheads.

Raw materials, packaging materials, spare parts and factory supplies are valued at the lower of cost determined under the weighted average cost method and net realisable value. Raw materials, packaging materials, spare parts and factory supplies are charged to production costs whenever consumed.

4.5 Assets held for sale

The Group classifies non-current assets as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Noncurrent assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

The Group will classify assets held for sale when the sale is highly probable, which is completed within one year from the date of the classification. In addition, the asset is available for immediate sale in its present condition.

4.6 Investments

Investments in joint ventures and associates are accounted for in the consolidated financial statements using the equity method.

Investments in subsidiaries, joint ventures and associates are accounted for in the separate financial statements using the cost method less allowance for loss on impairment (if any).

4.7 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).

Depreciation of investment properties is calculated by reference to their costs on the straight-line basis over the estimated useful lives of 5 and 20 years. Depreciation is included in profit or loss. No depreciation is provided on land.

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.

4.8 Property, plant and equipment/Depreciation

Land is stated at cost. Building and equipment are stated at cost less accumulated depreciation and less allowance for loss on impairment of assets (if any).

Building and equipment acquired through business combination are initially recognised at their fair value on the date of business acquisition. Following the initial recognition, the building and equipment are carried at cost less accumulated depreciation and less allowance for loss on impairment of assets (if any).

Depreciation of plant and equipment is calculated by reference to their costs less residual value on the straight-line basis over the following estimated useful lives:

Land improvement	20 years
Buildings and complements	20 to 47 years
Building improvements	20 to 30 years
Machinery, tools and equipment	5 to 20 years
Furniture and office equipment	3 to 5 years
Vehicles	5 to 10 years
Vessels, tools and equipment	2.5 to 30 years

Depreciation is included in profit or loss.

No depreciation is provided on land, construction in progress and equipment under installation.

An item of property, plant 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.

4.9 Intangible assets

Intangible assets acquired through business combination are initially recognised at their fair value on the date of business acquisition while intangible assets acquired in other cases are recognised at cost. Following the initial recognition, the intangible assets are carried at cost less accumulated amortisation and less allowance for loss on impairment of assets (if any).

Intangible assets with finite 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 expense is charged to profit or loss.

A summary of the intangible assets with finite useful lives is as follows:

	<u>Useful lives</u>
Computer software	5 years
Customer relationship	8 to 29 years
Non-competition clause	5 years
Backlog	3 to 4 years

4.10 Goodwill

Goodwill is initially recorded at cost, which equals to the excess of cost of business combination over the fair value of the net assets acquired. If the fair value of the net assets acquired exceeds the cost of business combination, the excess is immediately recognised as gain in profit or loss.

Goodwill is carried at cost less allowance for impairment loss (if any). Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of group of cash-generating unit that are expected to benefit from the synergies of the combination. The Group estimates the recoverable amount of each group of cash-generating unit to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised in profit or loss and will not be reversed in future periods.

4.11 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 recognises right-of-use assets and lease liabilities based on lease payments for all leases as at the date underlying assets are available for use (the commencement date of the lease), except a lease that has a lease term of no more than 12 months or a lease of low-value assets, for which the Group recognises lease payments as expenses on a straight-line basis over the lease term.

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.

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 terms.

Land and buildings	1 to 50 years
Machinery and equipment	5 to 17 years
Motor vehicles	3 to 6 years

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term, discounted 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. The carrying amount of lease liabilities is remeasured if there is a lease modification.

4.12 Related party transactions

Related parties comprise enterprises and individuals that control, or are controlled by, the Group, whether directly or indirectly, or which are under common control with the Group.

They also include joint ventures, associates and individuals which directly or indirectly own a voting interest in the Group that gives them significant influence over the Group, key management personnel, directors and officers with authority in the planning and direction of operations of the Group.

4.13 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency. Items of each entity included in the consolidated financial statements of each entity are measured using the functional currency of that entity.

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 the reporting period.

Gains and losses on exchange are included in profit or loss.

4.14 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, 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. In determining value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that, based on information available, reflects the amount that the Group could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

An impairment loss is recognised in profit or loss.

4.15 Employee benefits

Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

Post-employment benefits and other long-term employee 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 contributions of the Group is recognised as expenses when incurred.

Defined benefit plans and other long-term employee benefits

The Group has obligations in respect of the severance payments they must make to employees upon retirement under labor law and other employee benefit plans. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Company and its local subsidiaries provide other long-term employee benefit plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans 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.

Actuarial gains and losses arising from other long-term benefits are recognised immediately in profit or loss.

4.16 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.

4.17 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 those are recorded directly to shareholders' equity.

4.18 Financial instruments

The Group initially measures financial assets at their 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 at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognised in profit or loss.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income 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 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 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 trade receivables and contract assets, 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.

4.19 Derivatives and hedge accounting

The Group entered into commodity forward contracts and forward exchange contracts to hedge against fluctuations in commodity prices and foreign exchange rates, respectively.

Derivatives are initially recognised at fair value on the date of the derivative contract and are subsequently remeasured at fair value. They are carried as financial assets or financial liabilities depending on the fair value of the derivatives. Subsequent changes in fair value are recognised in profit or loss, unless the derivative is designated as an effective hedging instrument under a cash flow hedge, when it is recognised using hedge accounting.

Hedge accounting 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 and later reclassified to profit or loss when the hedged cash flows affect profit or loss or no longer exist.

The Group prepares formal documentation on the date that hedge accounting is applied, and provides regular updates regarding the risk management objectives and strategies and the relationships between the hedging instruments and hedged items, including the nature of the risks being hedged, how the Group assesses the hedge effectiveness, analysis of the causes of hedge ineffectiveness and how the hedge ratio is determined.

The Group considers hedging effective when all of the following requirements are met.

- There is an economic relationship between hedged items and hedging instruments.
- Counterparty credit risk is not a significant factor in the change in the fair value of hedging instruments and hedged items.
- The ratio of the quantity of hedging instruments to the quantity of hedged items is equal to the hedge ratio.

4.20 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 judgments and estimates

The preparation of financial statements in conformity with financial reporting standards requires management to make subjective judgments and estimates regarding matters that are inherently uncertain. These judgments and estimates affect reported amounts and disclosures, and actual results could differ from these estimates. Significant judgments and estimates are as follows:

Consolidation of subsidiary that the Group hold less than half of shares

The management of the Group determined that the Group has control over KBC Trading Sdn Bhd, even though the Group holds 30 percent of shares that is less than half of shares. This is because the Group has control over that company through its board of directors. As a result, KBC Trading Sdn Bhd is deemed to be a subsidiary of the Group and has to be included in the consolidated financial statements from the date on which the Group assumed control.

Allowance for expected credit losses of trade receivables and contract assets

In determining an allowance for expected credit losses of trade receivables and contract assets, the management needs to make judgement and estimates based upon, among other things, past collection history, aging profile of outstanding debts and the forecast economic condition for groupings of various customer segments with similar credit risks. The Group's historical credit loss experience and forecast economic conditions may also not be representative of whether a customer will actually default in the future.

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 exercises judgement, using a variety of valuation techniques and models. The input to these models is taken from observable markets, and includes consideration of credit risk, liquidity, correlation and longer-term volatility of financial instruments. Change in assumptions about these factors could affect the fair value recognised in the statement of financial position and disclosures of fair value hierarchy.

Net realisable value of inventories

The management uses judgment to estimate the net realisable value of inventories taking into consideration the fluctuation of price or cost directly relating to events occurring after the reporting period.

6. Trade and other receivables

	(Unit: Thousand Baht)			
	Consolidated	financial	Separate	
	statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
<u>Trade receivables - related parties</u> (Note 7)				
Aged on the basis of due dates				
Not yet due	407,677	494,285	708,590	872,208
Past due				
Up to 3 months	-	74	60,869	73,114
3 - 6 months	-	12,899	47,835	40,063
6 - 9 months	-	341	18,124	9,517
9 - 12 months	128	-	7,385	70
Over 12 months	-	-	252,027	225,048
Total	407,805	507,599	1,094,830	1,220,020
Less: Allowance for expected credit losses	-	-	(248,959)	(225,048)
Total trade receivables - related parties, net	407,805	507,599	845,871	994,972

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
<u>Trade receivables - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	2,609,909	2,002,695	1,203,480	1,268,593
Past due				
Up to 3 months	532,571	546,551	205,597	299,444
3 - 6 months	301,376	163,464	126,051	75,173
6 - 9 months	126,813	74,701	39,049	7,138
9 - 12 months	40,979	39,795	3,633	2,518
Over 12 months	434,481	372,772	84,381	67,906
Total	4,046,129	3,199,978	1,662,191	1,720,772
Less: Allowance for expected credit losses	(453,589)	(388,248)	(97,653)	(76,660)
Total trade receivables - unrelated parties, net	3,592,540	2,811,730	1,564,538	1,644,112
Total trade receivables - net	4,000,345	3,319,329	2,410,409	2,639,084
<u>Other receivables</u>				
Accounts receivable from commodity forward contracts				
	194,161	-	194,161	-
Other receivables - related parties (Note 7)	32,377	29,632	280,146	279,369
Other receivables - unrelated parties	9,835	3,450	1,383	1,181
Total other receivables	236,373	33,082	475,690	280,550
Total trade and other receivables - net	4,236,718	3,352,411	2,886,099	2,919,634

The normal credit terms are due within 90 days.

Set out below is the movements in the allowance for expected credit losses of trade and other receivables.

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Beginning balance	388,248	326,631	301,708	279,526
Allowance for expected credit losses	33,454	57,192	14,252	7,876
Effect from foreign exchange	31,887	4,425	30,652	14,306
Ending balance	453,589	388,248	346,612	301,708

7. Related party transactions

During the year, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Group and those related parties.

(Unit: Million Baht)

	Consolidated		Separate		Transfer Pricing Policy
	financial statements		financial statements		
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	
<u>Transactions with subsidiaries</u>					
(eliminated from the consolidated financial statements)					
Sales and service income	-	-	6,162	4,883	Cost plus certain margin
Rental and service income	-	-	8	6	Contract price
Technical and administrative assistance income	-	-	61	57	Contract price
Interest income	-	-	28	37	At rate of 1.0 - 2.5 percent and LIBOR plus 1.5 percent per annum
Dividend income	-	-	187	227	
Purchases of goods	-	-	10	5	Cost plus certain margin
Rental and service expenses	-	-	2,112	3,487	Contract price
<u>Transactions with joint arrangements</u>					
Sales and service income	727	1,722	724	1,722	Market price / contract price
Revenues from construction contracts	102	-	-	-	Contract price
Rental and service income	1	-	-	-	Contract price
Interest income	1	-	-	-	At rate of 32 percent per annum
<u>Transactions with associates</u>					
Sales and service income	13	190	12	157	Market price / contract price
Dividend income	-	-	86	58	
Rental and service expense	3	-	-	-	Contract price
<u>Transactions with related companies</u>					
Sales and service income	2,021	1,308	2,021	1,302	Market price / contract price
Rental and service income	4	1	3	1	Contract price
Rental and service expenses	91	86	68	82	Contract price
Technical and administrative assistance expenses	42	42	29	42	Contract price

The balances of the accounts between the Group and those related companies as at 31 December 2021 and 2020 are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
(Unit: Thousand Baht)				
<u>Trade and other receivables - related parties</u> (Note 6)				
Subsidiaries	-	-	1,106,588	1,023,516
Joint ventures	182,127	362,649	62,576	310,909
Associates	5,727	47,552	-	38,923
Related companies (other joint operator)	48,573	-	3,240	-
Related companies (common shareholders and directors)	203,755	127,030	202,572	126,041
Total trade and other receivables - related parties	440,182	537,231	1,374,976	1,499,389
Less: Allowance for expected credit losses	-	-	(248,959)	(225,048)
Total trade and other receivables - related parties, net	440,182	537,231	1,126,017	1,274,341
<u>Unbilled receivables</u>				
Related company (other joint operator)	13,642	-	-	-
Total Unbilled receivables	13,642	-	-	-
<u>Short-term loans to related parties</u>				
Subsidiaries	-	127,000	110,000	265,000
Related company (other joint operator)	25,226	-	-	-
Total short-term loans to related parties	25,226	127,000	110,000	265,000
<u>Long-term loans to related parties</u>				
Subsidiaries	-	-	675,244	1,305,671
Total long-term loans to related parties	-	-	675,244	1,305,671
<u>Trade and other payables - related parties</u> (Note 18)				
Subsidiaries	-	-	2,317,203	2,426,698
Joint venture	-	13	-	13
Associates	-	54	-	54
Related companies (common shareholders and directors)	93,778	87,502	63,542	86,991
Total trade and other payables - related parties	93,778	87,569	2,380,745	2,513,756

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
<u>Advance received from customer</u>				
Related company (other joint operator)	39,402	-	-	-
Total Advance received from customer	39,402	-	-	-
<u>Short-term loans from related parties</u>				
Subsidiaries	-	-	80,000	-
Total short-term loans from related parties	-	-	80,000	-
<u>Long-term loan from related party</u>				
Related company (shareholder of subsidiary)	7,719	6,789	-	-
Total long-term loan from related party	7,719	6,789	-	-

The balances and the movements of loans between the Company and those related companies are as follows:

(Unit: Thousand Baht)

		Consolidated financial statements				
		Balance as at	Increase from	Increase	Exchange	Balance as at
		31 December	business	(decrease)	differences	31 December
Company's name	Related by	2020	(Note 11)	the period	of financial	2021
					statements	
<u>Short-term loans to related parties</u>						
Thai Slurry Seal Co., Ltd.	Subsidiary	127,000	-	(127,000)	-	-
Nawarat Patanakarn PCL.	Other joint operator	-	-	25,226	-	25,226
Total		127,000	-	(101,774)	-	25,226
<u>Short-term loan from related party</u>						
Nawarat Patanakarn PCL.	Other joint operator	-	39,194	(39,194)	-	-
<u>Long-term loan from related party</u>						
Zhenjiang Highway	Shareholder of					
Materials Company	subsidiary	6,789	-	-	930	7,719

(Unit: Thousand Baht)

Company's name	Related by	Separate financial statements				
		Balance as at	Increase	Decrease	Balance as at	
		31 December	during	during	31 December	
		2020	the year	the year	Gain on	2021
					exchange	
Short-term loans to related parties						
Alpha Maritime Co., Ltd.	Subsidiary	123,000	-	(13,000)	-	110,000
Tipco Maritime Co., Ltd.	Subsidiary	15,000	-	(15,000)	-	-
Thai Slurry Seal Co., Ltd.	Subsidiary	127,000	-	(127,000)	-	-
Total		265,000	-	(155,000)	-	110,000

Long-term loans to related parties

AD Shipping Pte. Ltd.	Subsidiary	148,041	-	(113,346)*	3,925	38,620
Reta Link Pte. Ltd.	Subsidiary	459,671	-	(459,671)*	-	-
Pacific Bitumen Shipping Pte. Ltd.	Subsidiary	697,959	-	(126,047)*	64,712	636,624
Total		1,305,671	-	(699,064)	68,637	675,244

* AD Shipping Pte. Ltd., Reta Link Pte. Ltd. and Pacific Bitumen Shipping Pte. Ltd. offset their long-term loans to be repaid with outstanding balance of account payable to the Company.

Short-term loans from related parties

Raycol Asphalt Co., Ltd.	Subsidiary	-	60,000	-	-	60,000
Thai Bitumen Co., Ltd.	Subsidiary	-	20,000	-	-	20,000
Total		-	80,000	-	-	80,000

Directors and management's benefits

During the year 2021 and 2020, the Group had employee benefit expenses of their directors and management as detailed below.

	(Unit: Million Baht)			
	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	2021	2020	2021	2020
Short-term employee benefits	185	222	166	211
Post-employment benefits and other long-term benefits	3	4	3	4
Total	188	226	169	215

Guarantee obligations with related parties

The Group has outstanding guarantee obligations with its related parties, as described in Note 19 to the consolidated financial statements.

8. Contract assets/Contract liabilities

8.1 Contract balances

	(Unit: Thousand Baht)	
	Consolidated financial statements	
	<u>2021</u>	<u>2020</u>
Contract assets		
Unbilled receivables	722,923	-
Retention receivables	149,938	-
Total contract assets	<u>872,861</u>	<u>-</u>
Contract liabilities		
Advances received from customers	665,845	-
Total contract liabilities	<u>665,845</u>	<u>-</u>

8.2 Unbilled receivables

As at 31 December 2021, the balance of unbilled receivables of Baht 723 million was expected to be billed within one year (2020: Nil).

8.3 Revenue recognised in relation to contract balances

During the year 2021, the Group recognised contract liabilities at the beginning of the year of Baht 245 million (2020: Nil) as revenue.

8.4 Revenue to be recognised for the remaining performance obligations

As at 31 December 2021, the Group expected to recognise revenue totaling Baht 7,367 million (2020: Nil) in the future in respect of performance obligations under contracts with customers that have not been satisfied or partially unsatisfied. The Group expects to satisfy these performance obligations within 2 years.

9. Inventories

(Unit: Thousand Baht)

	Consolidated financial statements					
	Cost		Reduction of cost to net realisable value		Inventories - net	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Finished goods	1,889,151	1,289,211	(1,011)	(807)	1,888,140	1,288,404
Raw materials	4,207,962	2,958,803	(9,128)	(12,149)	4,198,834	2,946,654
Packaging materials, spare parts and factory supplies	145,131	132,327	(726)	(641)	144,405	131,686
Goods in transit	139,174	1,016,105	-	-	139,174	1,016,105
Total	6,381,418	5,396,446	(10,865)	(13,597)	6,370,553	5,382,849

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduction of cost to net realisable value		Inventories - net	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Finished goods	1,374,365	939,191	(513)	-	1,373,852	939,191
Raw materials	3,768,037	2,847,439	-	-	3,768,037	2,847,439
Packaging materials, spare parts and factory supplies	9,322	8,958	-	(502)	9,322	8,456
Goods in transit	22,302	980,280	-	-	22,302	980,280
Total	5,174,026	4,775,868	(513)	(502)	5,173,513	4,775,366

During the current year, the Group reversed reduction cost of inventories by Baht 3.9 million, to reflect the net realisable value. This was deducted in cost of sales (2020: write-down of Baht 0.6 million) (The Company only: None (2020: reversed by Baht 5.4 million)).

10. Assets held for sale

In November 2021, a subsidiary in Singapore entered into a sell contract of vessel, together with its bunker oil and other related assets with an unrelated overseas company amounting to approximately USD 13 million or approximately Baht 446 million which net book value of such assets was approximately Baht 482 million. As a result, the subsidiary recorded impairment loss on its assets amounting to Baht 36 million in profit or loss and presented its assets as assets held for sale in its account.

In January 2022, the subsidiary received payment for the sales of such assets and delivered the vessel to the buyer.

11. Investments in subsidiaries

Details of investments in subsidiaries as presented in the separate financial statements are as follows:

Company's name	(Unit: Thousand Baht)			
	Investment cost		Dividend received	
	2021	2020	2021	2020
<u>Domestic subsidiaries</u>				
Raycol Asphalt Co., Ltd.	583,030	583,030	66,600	166,500
Thai Bitumen Co., Ltd.	386,696	386,696	112,500	-
Less: Allowance for impairment loss of investment	(60,775)	(60,775)	-	-
Tipco Maritime Co., Ltd.	2,945	2,945	-	-
Alpha Maritime Co., Ltd.	142,999	142,999	-	-
Bitumen Marine Co., Ltd.	149,999	149,999	-	-
Ravana 1020 Co., Ltd. (formerly known as Delta Shipping Co., Ltd.)	79,999	79,999	-	-
Tasco Shipping Co., Ltd.	289,999	289,999	-	-
Thai Slurry Seal Co., Ltd.	598,043	-	-	-
<u>Overseas subsidiaries</u>				
Tasco International (Hong Kong) Ltd.	537,072	537,072	-	-
Less: Allowance for impairment loss of investment	(65,420)	(65,420)	-	-
Kemaman Oil Corporation Sdn Bhd	1,303,035	1,303,035	-	-
Kemaman Bitumen Company Sdn Bhd	2,769,493	2,769,493	-	-
KBC Trading Sdn Bhd	1,377	1,377	-	-
Tipco Asphalt (Cambodia) Co., Ltd.	3,352	3,352	-	60,201
PT Asphalt Bangun Sarana	337,254	337,254	-	-
Pacific Bitumen Shipping Pte.Ltd.	1,340	1,340	-	-
Highway Resources Pte.Ltd.	717,054	717,054	8,381	-
AD Shipping Pte.Ltd.	430,232	430,232	-	-
Reta Link Pte.Ltd.	28,682	28,682	-	-
Tipco Asphalt Lao Company Limited	78,877	78,877	-	-
Total investments in subsidiaries	8,315,283	7,717,240	187,481	226,701

The paid-up capital and percentage of shareholding were presented in Note 2.2 to the consolidated financial statements.

Investment in Thai Slurry Seal

On 14 January 2021, the Company's Board of Director Meeting passed a resolution to approve the increase of its shareholding in Thai Slurry Seal from the current shareholding of 1,243,334 shares with the par value of Baht 100 per share, equivalent to 25 percent of total issued and paid-up shares, to 3,108,334 shares with the par value of Baht 100 per share, equivalent to 62.5 percent of total issued and paid-up shares, through the acquisition of 1,865,000 ordinary shares with the par value of Baht 100 per share, equivalent to 37.5 percent of the total issued and paid-up shares, at acquisition price of Baht 200 per share, totaling Baht 373 million.

On 1 February 2021, the Company received 1,865,000 ordinary shares of Thai Slurry Seal and made full payment for these shares. Therefore, the Company has had control over such subsidiary since 1 February 2021 (the acquisition date) onwards, resulted in Thai Slurry Seal's status change from an associate to a subsidiary.

As of 1 February 2021, Thai Slurry Seal had a subsidiary and joint operations as follows:

<u>Company's name</u>	<u>Nature of business</u>	<u>Country of incorporation</u>	<u>Related by</u>	<u>Shareholding percentage</u>
				(%)
Thanomwongse Service Co., Ltd.	Construction service and sales of construction materials	Thailand	Subsidiary	100.00
TN Joint Venture	Construction service	Thailand	Joint operations	51.61
TN-CEI Joint Venture	Construction service	Thailand	Joint operations	51.00

The Company remeasured previously held interest at fair value at acquisition date and recorded remeasurement gain on business combination amounting to Baht 20.7 million in the consolidated statement of comprehensive income. The Group completed the assessments of the fair values of identifiable assets, liabilities and contingent liabilities of Thai Slurry Seal. The fair values of assets and liabilities and the carrying amounts in the consolidated financial statements of Thai Slurry Seal as of 1 February 2021 were as follows:

	(Unit: Thousand Baht)	
	Fair value	Carrying value
Cash and cash equivalents	178,042	178,042
Trade and other receivables	291,616	291,616
Contract assets	676,984	676,984
Advances to subcontractors	238,208	238,208
Inventories	87,247	87,247
Property, plant and equipment (Note 15)	458,589	212,668
Right-of-use assets (Note 20)	75,446	75,446
Other assets	95,602	95,602
Short-term loan from financial institutions	(20,000)	(20,000)
Trade and other payables	(345,630)	(345,630)
Short-term loan from related party	(39,194)	(39,194)
Contract liabilities	(701,028)	(701,028)
Retention for construction	(14,854)	(14,854)
Provision for long-term employee benefits (Note 21)	(40,576)	(40,576)
Lease liabilities (Note 20)	(67,584)	(67,584)
Deferred tax liabilities	(5,024)	(5,024)
Other liabilities	(53,930)	(53,930)
Total	813,914	567,993
Backlog (Note 16)	129,386	
Customer relationship (Note 16)	47,028	
Deferred tax liabilities	(84,467)	
Net acquired assets (at 100%)	905,861	
Less: Non-controlling interests (at 37.5%)	(339,698)	
Net acquired assets in the Company's proportion (at 62.5%)	566,163	
Add: Goodwill	49,639	
Acquisition cost	615,802	

Costs of the acquisition were summarised below.

	(Unit: Thousand Baht)
Carrying amount based on equity method before business combination	222,054
Remeasurement gain on business combination	20,748
Cash paid in the acquisition	373,000
Costs of the acquisition	<u>615,802</u>
Cash paid in the acquisition	373,000
Less: Cash and cash equivalents as of acquisition date	<u>(178,042)</u>
Cash paid in the acquisition - net from cash and cash equivalent received	<u>194,958</u>

12. Investments in joint ventures

12.1 Details of investments in joint ventures:

Investments in joint ventures represent investments in entities which are jointly controlled by the Company and other companies. Details of these investments are as follows:

		(Unit: Thousand Baht)					
		Consolidated financial statements				Carrying amounts	
Joint ventures	Nature of business	Shareholding		Cost		based on equity	
		percentage				method	
		<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
		(%)	(%)				
Asia Bitumen Trading Pte. Ltd. (Owned by TIHK)	Distribution of asphalt and petroleum products	50	50	242	242	39,712	40,808
Borneo Asphalt Sdn Bhd (Owned by KBC)	Distribution of asphalt products	50	50	23,815	23,815	13,261	12,170
Phoenix Asphalt Philippines Inc.	Manufacture and distribution of asphalt and petroleum products	40	40	<u>67,553</u>	<u>67,553</u>	<u>79,595</u>	<u>71,059</u>
Total				<u>91,610</u>	<u>91,610</u>	<u>132,568</u>	<u>124,037</u>

(Unit: Thousand Baht)

Joint venture	Nature of business	Separate financial statements					
		Shareholding		Cost		Carrying amounts	
		percentage				based on cost	
		2021	2020	2021	2020	2021	2020
		(%)	(%)				
Phoenix Asphalt Philippines Inc.	Manufacture and distribution of asphalt and petroleum products	40	40	67,553	67,553	67,553	67,553
Total				67,553	67,553	67,553	67,553

12.2 Share of comprehensive income

The Group recognised its share of profit/loss from investments in the joint ventures in the consolidated financial statements as follows:

(Unit: Thousand Baht)

Joint ventures	Consolidated financial statements	
	Share of profit (loss) from investments in joint ventures during the year	
	2021	2020
Asia Bitumen Trading Pte. Ltd.	(5,366)	9,623
Borneo Asphalt Sdn Bhd	(954)	(2,656)
Phoenix Asphalt Philippines Inc.	5,098	2,282
Total	(1,222)	9,249

12.3 Summarised financial information about material joint ventures

Financial information of Asia Bitumen Trading Pte. Ltd. ("ABT")

Summarised information about financial position as at 31 December 2021 and 2020:

(Unit: Million Baht)

	2021	2020
Cash and cash equivalents	100.1	246.1
Trade and other receivables	-	174.6
Other assets	2.4	0.8
Trade and other payables	(13.2)	(324.8)
Other liabilities	(9.9)	(15.1)
Net assets	79.4	81.6
Shareholding percentage (%)	50	50
Carrying amounts of joint venture based on equity method	39.7	40.8

Summarised information about profit and loss for the years ended 31 December 2021 and 2020:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Total revenues	1,187.0	3,092.6
Cost of goods sold	(1,171.6)	(3,044.6)
Total expenses	(26.2)	(28.8)
Profit (loss) for the year	(10.8)	19.2

Financial information of Borneo Asphalt Sdn Bhd

Summarised information about financial position as at 31 December 2021 and 2020:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Cash and cash equivalents	41.1	9.1
Trade and other receivables	38.5	4.3
Other assets	407.3	326.8
Trade and other payables	(17.1)	(47.5)
Other liabilities	(443.2)	(268.3)
Net assets	26.6	24.4
Shareholding percentage (%)	50	50
Carrying amounts of joint venture based on equity method	13.3	12.2

Summarised information about profit and loss for the years ended 31 December 2021 and 2020:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Total revenues	325.5	2.1
Cost of goods sold	(310.5)	(3.6)
Total expenses	(16.9)	(3.8)
Loss for the year	(1.9)	(5.3)

Financial information of Phoenix Asphalt Philippines Inc.

Summarised information about financial position as at 31 December 2021 and 2020:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Cash and cash equivalents	15.0	27.2
Trade and other receivables	28.4	33.4
Other assets	195.4	161.0
Trade and other payables	(13.6)	(20.8)
Other liabilities	(26.2)	(23.2)
Net assets	199.0	177.6
Shareholding percentage (%)	40	40
Carrying amounts of joint venture based on equity method	79.6	71.0

Summarised information about profit and loss for the years ended 31 December 2021 and 2020:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Total revenues	447.3	287.9
Cost of goods sold	(403.0)	(256.6)
Total expenses	(31.6)	(25.8)
Profit for the year	12.7	5.5

13. Investments in associates

13.1 Details of associates

		(Unit: Thousand Baht)					
		Consolidated financial statements					
Company's name	Nature of business	Shareholding percentage		Cost		Carrying amounts based on equity method	
		<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
		(%)	(%)				
Colasie Co., Ltd.	Holding company	40	40	18,404	18,404	479,188	434,691
PT Sarana Distribusi Aspal Nusantara (Owned by ABS)	Barge rental service	49	49	1,313	1,313	2	53
Thai Slurry Seal Co., Ltd.*	Road rehabilitation contractor	25	25	-	225,043	-	224,987
Total investments in associates				<u>19,717</u>	<u>244,760</u>	<u>479,190</u>	<u>659,731</u>

(Unit: Thousand Baht)

		Separate financial statements					
Company's name	Nature of business	Shareholding		Cost		Carrying amounts based on cost method	
		percentage					
		<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
		(%)	(%)				
Colasie Co., Ltd.	Holding company	40	40	18,404	18,404	18,404	18,404
Thai Slurry Seal Co., Ltd.*	Road rehabilitation contractor	-	25	-	225,043	-	225,043
Total investments in associates				<u>18,404</u>	<u>243,447</u>	<u>18,404</u>	<u>243,447</u>

13.2 Share of comprehensive income and dividend received

The Group recognised its share of profit/loss from investments in associates in the consolidated financial statements and dividend income in the separate financial statements as follows:

(Unit: Thousand Baht)

Company's name	Consolidated financial statements		Separate financial statements	
	Share of profit (loss) from investment		Dividend received	
	in associates during the year		during the year by the Company	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Colasie Co., Ltd.	130,365	124,148	85,505	57,728
PT Sarana Distribusi				
Aspal Nusantara	(131)	(187)	-	-
Thai Slurry Seal Co., Ltd.*	(585)	(14,887)	-	-
Total	<u>129,649</u>	<u>109,074</u>	<u>85,505</u>	<u>57,728</u>

*During the current year, Thai Slurry Seal's status was changed from an associate to a subsidiary as described in Note 11 to the consolidated financial statements.

13.3 Summarised financial information about material associates

Financial information of Colasie Co., Ltd.

Financial information of Colasie Co., Ltd. as at 31 December 2021 and 2020 and for the years then ended are summarised below.

	(Unit: Million Euro)	
	<u>2021</u>	<u>2020</u>
Paid-up capital	1.04	1.04
Total assets	4.75	4.75
Total liabilities	0.03	0.00
Total revenues	5.87	3.62
Profit for the year	5.79	3.58

14. Investment properties

(Unit: Thousand Baht)

	Consolidated financial statements		
	The Company's		
	land, buildings and		
	equipment located		
	Land of	Thai	
	at Petchburi plant	Bitumen	Total
As at 31 December 2021:			
Cost	267,472	383,608	651,080
<u>Less</u> Accumulated depreciation	(137,804)	-	(137,804)
<u>Less</u> Allowance for diminution in value	(86,868)	(237,375)	(324,243)
Net book value	<u>42,800</u>	<u>146,233</u>	<u>189,033</u>
As at 31 December 2020:			
Cost	267,472	383,608	651,080
<u>Less</u> Accumulated depreciation	(137,804)	-	(137,804)
<u>Less</u> Allowance for diminution in value	(86,868)	(237,375)	(324,243)
Net book value	<u>42,800</u>	<u>146,233</u>	<u>189,033</u>

(Unit: Thousand Baht)

	Separate financial statements		
	The Company's land, buildings and equipment located at Petchburi plant	The Company's land for rent located at Suratthani province	Total
As at 31 December 2021:			
Cost	267,472	61,438	328,910
<u>Less</u> Accumulated depreciation	(137,804)	(9,896)	(147,700)
<u>Less</u> Allowance for diminution in value	(86,868)	-	(86,868)
Net book value	<u>42,800</u>	<u>51,542</u>	<u>94,342</u>
As at 31 December 2020:			
Cost	267,472	61,438	328,910
<u>Less</u> Accumulated depreciation	(137,804)	(9,896)	(147,700)
<u>Less</u> Allowance for diminution in value	(86,868)	-	(86,868)
Net book value	<u>42,800</u>	<u>51,542</u>	<u>94,342</u>

A reconciliation of the net book value of investment properties for 2021 and 2020 is presented below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Net book value at beginning of year	189,033	256,933	94,342	94,342
Impairment loss	-	(67,900)	-	-
Net book value at end of year	<u>189,033</u>	<u>189,033</u>	<u>94,342</u>	<u>94,342</u>

The fair values of the investment properties, appraised by an independent professional valuer using the Sales Comparison Approach, as at 31 December 2021 and 2020 are stated below:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
The Company's land for rent located at				
Suratthani province	-	-	218,000	213,000
The Company's land, buildings and equipment				
located at Petchburi plant	42,800	42,800	42,800	42,800
Land of Thai Bitumen	146,233	146,233	-	-

15. Property, plant and equipment

	Consolidated financial statements							(Unit: Thousand Baht)
	Land and land improvement	Buildings, improvements and complements	Machinery, tools and equipment	Furniture, office equipment and vehicles	Vessels	Construction in progress	and equipment under installation	
Cost								
As at 1 January 2020	680,966	930,447	7,261,488	1,328,204	4,560,485	778,773	15,540,363	
Additions	4,682	12,483	51,077	37,138	93,202	485,950	684,532	
Disposals/written off	(894)	(11,818)	(169,499)	(108,897)	(83,760)	(1,211)	(376,079)	
Transfer in (transfer out)	12,455	40,212	828,032	17,268	-	(897,967)	-	
As at 31 December 2020	697,209	971,324	7,971,098	1,273,713	4,569,927	365,545	15,848,816	
Additions	2,711	6,767	60,585	27,936	60,078	362,921	520,998	
Increase from business combination (Note 11)	18,086	14,586	282,923	142,994	-	-	458,589	
Disposals/written off	(30,606)	(8,452)	(49,159)	(157,593)	-	(1,140)	(246,950)	
Transfer in (transfer out)	9,599	82,427	170,315	3,406	-	(265,747)	-	
Classified as assets held for sale (Note 10)	-	-	(280)	(104)	(599,809)	-	(600,193)	
As at 31 December 2021	696,999	1,066,652	8,435,482	1,290,352	4,030,196	461,579	15,981,260	

(Unit: Thousand Baht)

Consolidated financial statements

	Land and land improvement	Buildings, building improvements and complements	Machinery, tools and equipment	Furniture, office equipment and vehicles	Vessels	Construction in progress and equipment under installation	Total
Accumulated depreciation							
As at 1 January 2020	344,480	532,508	3,745,502	785,551	1,127,749	-	6,535,790
Depreciation for the year	5,615	27,609	409,535	124,249	234,670	-	801,678
Accumulated depreciation on disposals written off	(776)	(10,899)	(166,339)	(106,969)	(83,760)	-	(368,743)
As at 31 December 2020	349,319	549,218	3,988,698	802,831	1,278,659	-	6,968,725
Depreciation for the year	10,442	33,849	493,076	136,983	268,165	-	942,515
Accumulated depreciation on disposals written off	(30,252)	(7,587)	(44,761)	(154,026)	-	-	(236,626)
Classified as assets held for sale	-	-	(25)	(16)	(125,262)	-	(125,303)
As at 31 December 2021	329,509	575,480	4,436,988	785,772	1,421,562	-	7,549,311
Allowance for impairment loss							
As at 1 January 2020	1,183	50,769	26,921	2,066	-	5,049	85,988
Increase during the year	-	-	6,273	-	-	-	6,273
Disposals/write-off	-	-	(795)	-	-	-	(795)
As at 31 December 2020	1,183	50,769	32,399	2,066	-	5,049	91,466
Increase during the year	-	-	1,665	-	36,152	-	37,817
Classified as assets held for sale	-	-	-	-	(36,152)	-	(36,152)
As at 31 December 2021	1,183	50,769	34,064	2,066	-	5,049	93,131

(Unit: Thousand Baht)

	Consolidated financial statements						
	Land and land improvement	Buildings, building improvements and complements	Machinery, tools and equipment	Furniture, office equipment and vehicles	Vessels	Construction in progress and equipment under installation	Total
Translation adjustments							
As at 1 January 2020	-	9,420	(364,374)	(23,687)	(224,863)	(29,369)	(632,873)
Translation adjustments during the year	-	1,661	(9,584)	(944)	3,564	5,334	31
As at 31 December 2020	-	11,081	(373,958)	(24,631)	(221,299)	(24,035)	(632,842)
Translation adjustments during the year	-	10,642	349,142	7,806	181,222	(4,592)	544,220
As at 31 December 2021	-	21,723	(24,816)	(16,825)	(40,077)	(28,627)	(88,622)
Net book value							
As at 31 December 2020	346,707	382,418	3,576,043	444,185	3,069,969	336,461	8,155,783
As at 31 December 2021	366,307	462,126	3,939,614	485,689	2,568,557	427,904	8,250,197
Depreciation for the year							
2020 (Baht 694 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)							801,678
2021 (Baht 760 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)							942,515

(Unit: Thousand Baht)

Separate financial statements

	Land and land improvement	Buildings, building improvements and complements	Machinery, tools and equipment	Furniture, office equipment and vehicles	Construction in progress and equipment under installation	Total
Cost						
As at 1 January 2020	493,681	343,359	692,562	799,142	134,523	2,463,267
Additions	3,594	2,879	18,969	4,101	54,494	84,037
Disposals/written off	(894)	(9,567)	(101,743)	(72,852)	(710)	(185,766)
Transfer in (transfer out)	10,506	21,768	100,753	7,552	(140,579)	-
As at 31 December 2020	506,887	358,439	710,541	737,943	47,728	2,361,538
Additions	1,784	4,875	13,236	2,740	34,800	57,435
Disposals/written off	(473)	(2,569)	(24,858)	(97,891)	(754)	(126,545)
Transfer in (transfer out)	2,941	24,056	43,860	408	(71,265)	-
As at 31 December 2021	511,139	384,801	742,779	643,200	10,509	2,292,428
Accumulated depreciation						
As at 1 January 2020	251,727	206,580	547,603	471,932	-	1,477,842
Depreciation for the year	3,819	9,186	50,788	71,638	-	135,431
Accumulated depreciation on disposal/written off	(776)	(8,968)	(101,432)	(71,571)	-	(182,747)
As at 31 December 2020	254,770	206,798	496,959	471,999	-	1,430,526
Depreciation for the year	4,295	10,620	53,203	64,304	-	132,422
Accumulated depreciation on disposal/written off	(329)	(2,194)	(24,756)	(96,936)	-	(124,215)
As at 31 December 2021	258,736	215,224	525,406	439,367	-	1,438,733

(Unit: Thousand Baht)

	Separate financial statements					Total
	Land and land improvement	Buildings, building improvements and complements	Machinery, tools and equipment	Furniture, office equipment and vehicles	Construction in progress and equipment under installation	
Allowance for impairment loss						
As at 31 December 2020	1,183	-	6,273	-	-	7,456
Increase during the year	-	-	-	-	-	-
As at 31 December 2021	1,183	-	6,273	-	-	7,456
Net book value						
As at 31 December 2020	250,934	151,641	207,309	265,944	47,728	923,556
As at 31 December 2021	251,220	169,577	211,100	203,833	10,509	846,239
Depreciation for the year						
2020 (Baht 117 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)						135,431
2021 (Baht 108 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)						132,422

As at 31 December 2021, certain items of plant and equipment items had been fully depreciated but were still in use. The original cost of those assets amounted to approximately Baht 3,061 million (2020: Baht 3,008 million) (The Company only: Baht 1,165 million (2020: Baht 1,202 million)).

16. Intangible assets

(Unit: Thousand Baht)

	Consolidated financial statements					Separate financial statements			
	Computer software	Customer relationship	Non-competition clause	Backlog	Computer software under installation	Total	Computer software	Computer under installation	Total
As at 31 December 2021:									
Cost	208,925	224,112	11,724	129,386	887	575,034	164,143	887	165,030
<u>Less</u> Accumulated amortisation	(167,984)	(90,929)	(10,725)	(40,123)	-	(309,761)	(132,825)	-	(132,825)
Translation adjustments	2,110	-	(999)	-	-	1,111	-	-	-
Net book value	43,051	133,183	-	89,263	887	266,384	31,318	887	32,205
As at 31 December 2020:									
Cost	191,827	177,083	11,724	-	1,966	382,600	156,839	1,966	158,805
<u>Less</u> Accumulated amortisation	(140,507)	(73,784)	(10,725)	-	-	(225,016)	(108,701)	-	(108,701)
Translation adjustments	1,775	-	(999)	-	-	776	-	-	-
Net book value	53,095	103,299	-	-	1,966	158,360	48,138	1,966	50,104

A reconciliation of the net book value of 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	158,360	195,514	50,104	71,617
Acquisition of computer software	10,975	8,732	6,225	5,684
Increase from business combination (Note 11)	181,458	-	-	-
Amortisation	(84,744)	(45,837)	(24,124)	(27,197)
Translation adjustments	335	(49)	-	-
Net book value at end of year	<u>266,384</u>	<u>158,360</u>	<u>32,205</u>	<u>50,104</u>

17. Short-term loans from financial institutions

	(Unit: Thousand Baht)					
	Interest rates		Consolidated		Separate	
	(% per annum)		financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Loans in Thai Baht	1.25 - 2.35	1.00 - 1.75	3,188,381	1,451,764	3,096,247	1,451,764
Loan in Renminbi	4.00	-	21,003	-	-	-
Loans in Indonesia Rupiah	6.40 - 6.55	6.85	206,527	88,648	-	-
			<u>3,415,911</u>	<u>1,540,412</u>	<u>3,096,247</u>	<u>1,451,764</u>

18. 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 7)	674	946	2,315,802	2,427,259
Trade payables - unrelated parties	2,050,598	2,086,299	1,515,174	1,930,651
Accounts payable from commodity forward contracts	-	45,079	-	45,079
Retention for construction	44,905	12,750	5,726	5,546
Other payables - related parties (Note 7)	93,104	86,623	64,943	86,497
Other payables and accrued expenses - unrelated parties	917,746	799,901	243,584	340,876
Total trade and other payables	<u>3,107,027</u>	<u>3,031,598</u>	<u>4,145,229</u>	<u>4,835,908</u>

19. Credit facilities

The credit facilities of the Group granted by financial institutions are secured by the following collaterals:

- a) The guarantees by the Company, its subsidiaries and a shareholder of a subsidiary.
- b) The pledges/mortgages by the assets of subsidiaries of which the net book value as at 31 December 2021 and 2020 of the assets are summarised below.

(Unit: Million Baht)

	Consolidated financial statements	
	<u>2021</u>	<u>2020</u>
Property, plant and equipment - net	345	363

- c) The prohibition from creating lien over assets of the Group.
- d) Financial support letters provided by the Group to banks.
- e) The Company allows its subsidiaries to use its facilities obtained from banks, with the Company responsible to the banks for the amounts drawn down by the subsidiaries.

20. Leases

The Group has lease contracts for various items of property, plant, and equipment used in its operations. Leases generally have lease terms between 1 - 50 years.

a) Right-of-use assets

Movement of right-of-use assets for the years ended 31 December 2021 and 2020 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements				
	Land and buildings	Machinery and equipment	Motor vehicles	Office equipment	Total
1 January 2020	490,512	49,734	28,760	-	569,006
Additions	21,896	12,709	29,635	-	64,240
Depreciation for the year	(52,544)	(9,083)	(13,855)	-	(75,482)
Translation adjustments	1,443	13	-	-	1,456
31 December 2020	461,307	53,373	44,540	-	559,220
Additions	84,068	60,352	34,292	-	178,712
Increase from business					
Combination (Note 11)	20,006	31,508	22,412	1,520	75,446
Depreciation for the year	(64,619)	(16,454)	(26,636)	(522)	(108,231)
Written off	(11,179)	-	-	-	(11,179)
Translation adjustments	39,915	(5,233)	-	-	34,682
31 December 2021	529,498	123,546	74,608	998	728,650

(Unit: Thousand Baht)

	Separate financial statements		
	Land and buildings	Motor vehicles	Total
1 January 2020	100,496	25,018	125,514
Additions	1,508	27,509	29,017
Depreciation for the year	(15,167)	(12,011)	(27,178)
31 December 2020	86,837	40,516	127,353
Additions	811	14,535	15,346
Depreciation for the year	(14,206)	(15,180)	(29,386)
Written off	(10,564)	-	(10,564)
31 December 2021	62,878	39,871	102,749

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	504,126	338,132	113,359	138,808
Less: Deferred interest expenses	(80,487)	(57,614)	(8,357)	(11,781)
Total	423,639	280,518	105,002	127,027
Less: Portion due within one year	(107,742)	(62,041)	(25,238)	(26,929)
Lease liabilities - net of current portion	315,897	218,477	79,764	100,098

A maturity analysis of lease payments is disclosed in Note 33.2 to the consolidated 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	108,231	75,482	29,386	27,178
Interest expense on lease liabilities	15,201	9,914	3,330	3,499
Expense relating to short-term leases	5,881	3,950	763	3,661
Expense relating to leases of low-value assets	5,762	5,457	4,521	3,645

d) Others

The Group had total cash outflows for leases for the year ended 31 December 2021 of Baht 128 million (2020: Baht 76 million) (the Company only: Baht 37 million, 2020: Baht 34 million), including the cash outflow related to short-term lease and leases of low-value assets.

21. Provision for long-term employee benefits

Provision for long-term employee benefits, which is compensations on employees' retirement and long service award, are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Provision for long-term employee benefits at beginning of year	166,386	167,693	114,115	119,182
Increase from business combination (Note 11)	40,576	-	-	-
Included in profit or loss:				
Defined benefit plans				
Current service cost	17,262	15,200	9,540	9,308
Past service cost	(11,725)	-	-	-
Interest cost	5,086	4,031	1,799	1,906
Long service award	8,407	749	4,003	558
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
Demographic assumptions changes	-	2	-	-
Financial assumptions changes	(5,272)	402	(4,086)	-
Experience adjustments	48,026	491	38,365	-
Benefits paid during the year	(25,216)	(19,851)	(17,880)	(16,839)
Translation adjustments	3,352	(2,331)	-	-
Provision for long-term employee benefits at end of year	246,882	166,386	145,856	114,115

The Group expect to pay Baht 44 million of long-term employee benefits during the next year (Separate financial statements: Baht 26 million) (2020: Baht 27 million, separate financial statements: Baht 16 million).

As at 31 December 2021, the weighted average duration of the liabilities for long-term employee benefit was between 3 - 19 years (Separate financial statements: 3 years) (2020: 4 - 14 years, separate financial statements: 4 years).

Key actuarial assumptions used for the valuation are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(% per annum)	(% per annum)	(% per annum)	(% per annum)
Discount rate	2.0 - 8.0	2.5 - 8.0	2.0	2.5
Future salary increase rate	3.0 - 7.0	5.0 - 7.0	3.0 - 4.0	5.0
Staff turnover rate (depending on age of employee)	0.0 - 25.0	0.0 - 15.0	0.0 - 15.0	0.0 - 15.0

The results 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)

	31 December 2021			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>Increase 1%</u>	<u>Decrease 1%</u>	<u>Increase 1%</u>	<u>Decrease 1%</u>
Discount rate	(13)	15	(7)	8
Salary increase rate	13	(12)	7	(6)

(Unit: Million Baht)

	31 December 2020			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>Increase 1%</u>	<u>Decrease 1%</u>	<u>Increase 1%</u>	<u>Decrease 1%</u>
Discount rate	(7)	8	(4)	4
Salary increase rate	8	(7)	4	(4)

22. Share capital

On 8 April 2021, the 2021 Annual General Meeting of the Company's shareholders passed a resolution to approve a decrease of Baht 1,522,000 in the Company's registered share capital, from Baht 1,579,883,570 (1,579,883,570 ordinary shares with a par value of Baht 1 each) to Baht 1,578,361,570 (1,578,361,570 ordinary shares with a par value of Baht 1 each) by cancelling 1,522,000 unissued ordinary shares with a par value of Baht 1 each.

The Company registered the corresponding reduction in its registered share capital with the Ministry of Commerce on 9 April 2021.

23. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5 percent of its net income 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. At present, the statutory reserve has fully been set aside.

24. Insurance claim - net of damages and expenses from a fire

During 2020, the subsidiary had incurred additional operating expenses for crude storage, logistic handling and other related expenses amounted to USD 2 million or Baht 64 million. These expenses were presented as expenses from a fire incident until the date when damaged crude oil tanks were recommissioned for operation in the second quarter of 2020.

In the current year, the subsidiary received and recorded income of final payment pursuant to its insurance claim of MYR 34 million or approximately Baht 271 million (2020: MYR 24 million or approximately Baht 174 million).

25. Expenses by nature

Significant expenses by nature are as follows:

	(Unit: Million Baht)			
	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Salary, wages and other employee benefits	1,422	1,283	533	624
Depreciation and maintenance expenses	1,135	960	240	274
Costs related to production of goods and services (excluding of staff cost, depreciation and maintenance expenses)	20,477	20,103	17,826	20,009

26. Income tax

Income tax expenses for the years ended 31 December 2021 and 2020 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Current income tax:				
Current income tax charge	(419,382)	(786,308)	(260,051)	(556,183)
Adjustment in respect of income tax of previous year	(2,137)	(665)	-	-
Deferred tax:				
Relating to origination and reversal of temporary differences	(331,898)	29,633	(55,520)	16,371
Income tax expense reported in the statement of comprehensive income	<u>(753,417)</u>	<u>(757,340)</u>	<u>(315,571)</u>	<u>(539,812)</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 on actuarial gains and losses	(8,746)	197	(6,856)	-
Deferred tax on change in fair value of hedging instruments of cash flow hedges	15,631	16,874	15,631	16,874
	<u>6,885</u>	<u>17,071</u>	<u>8,775</u>	<u>16,874</u>

Reconciliation between income tax expenses and the product of accounting profit multiplied by the applicable tax rates 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>
Accounting profit before tax	<u>3,005,375</u>	<u>4,354,840</u>	<u>1,869,152</u>	<u>3,025,874</u>
Income tax at Thai corporate income tax rate of 20%	(601,075)	(870,968)	(373,830)	(605,175)
Adjustment in respect of income tax of previous year	(2,137)	(665)	-	-
Utilisation of previously unrecognised tax losses and capital allowance	5,641	65,223	-	-
Unused tax loss which has not recognised as deferred tax assets	(4,275)	(214)	-	-
Unutilised investment tax allowances which has not recognised as deferred tax assets	(183,349)	-	-	-
Difference of tax rate in group companies	(7,262)	12,318	-	-
Effects of:				
Non-deductible expenses	(72,658)	(78,943)	(5,238)	(7,185)
Additional expenses deductions allowed	2,215	28,237	1,077	9,795
Exemption of income	30,771	16,831	54,597	56,885
Promotional privileges (Note 27)	9,082	16,026	-	-
Tax privilege for a company that operates as an international trading center	3,129	2,435	3,129	2,435
Tax privilege for a company that operates as an international business center	4,694	3,652	4,694	3,652
Tax privileges for maritime commerce (Note 28)	26,754	17,583	-	-
Share of profit from investment in joint ventures and associates	25,686	23,665	-	-
Others	9,367	7,480	-	(219)
Total	<u>39,040</u>	<u>36,966</u>	<u>58,259</u>	<u>65,363</u>
Income tax expenses reported in the statement of comprehensive income	<u>(753,417)</u>	<u>(757,340)</u>	<u>(315,571)</u>	<u>(539,812)</u>

The tax rates enacted at the end of the reporting period of the Group is 0% to 25% (2020: 0% to 25%).

The components of deferred tax assets and deferred tax liabilities are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statement	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Deferred tax assets				
Allowance for doubtful accounts	62,356	45,953	69,322	60,342
Reduction of cost of inventories to net realisable value	2,565	212	103	100
Fair value of commodity forward contracts	53,708	135,789	53,708	135,789
Allowance for asset impairment	65,099	65,099	17,614	17,614
Provision for long-term employee benefits	51,727	34,377	29,171	22,823
Effect on elimination of intercompany transaction	940	52,337	-	-
Unutilised tax loss and capital allowance	330,588	299,412	9,543	12,632
Others	19,196	4,624	636	161
Total	<u>586,179</u>	<u>637,803</u>	<u>180,097</u>	<u>249,461</u>
Deferred tax liabilities				
Difference depreciation for tax purpose	(644,716)	(355,714)	(26,764)	(24,728)
Fair value of commodity forward contracts	(44,563)	(51,380)	(44,562)	(51,380)
Fair value of forward exchange contracts	(309)	(586)	(300)	(586)
Fair value adjustment of assets from business combination	(112,601)	(21,851)	-	-
Total	<u>(802,189)</u>	<u>(429,531)</u>	<u>(71,626)</u>	<u>(76,694)</u>
Presented as follows:				
Deferred tax assets	177,024	208,272	108,471	172,767
Deferred tax liabilities	393,034	-	-	-

As at 31 December 2021 and 2020, the overseas subsidiaries had deductible temporary differences and unused tax losses on which deferred tax assets have not been recognised as these subsidiaries believed that future taxable profits may not be sufficient to allow utilisation of the temporary differences and unused tax losses, as follows:

	<u>2021</u>	<u>2020</u>
	(Million)	(Million)
Malaysian Ringgit	98	5
Renminbi	33	33

In addition, Kemaman Bitumen Company Sdn Bhd were granted tax privilege for a corporate income tax reduction from the stipulated investment amount.

27. Promotional privileges

The subsidiaries were granted investment promotional privileges by the Board of Investment for mass transit systems and transportation of bulk goods. Important tax privileges is exemption of corporate income tax not exceeding of the stipulated amount for 8 years commencing from the following dates.

<u>Alpha Maritime Company Limited</u>	<u>Bitumen Marine Company Limited</u>	<u>Tasco Shipping Company Limited</u>
9 October 2014	29 October 2015	11 January 2013

28. Tax privileges for maritime commerce

The subsidiaries in Thailand which are engaged in marine transportation business, are entitled to withholding income tax privileges under the Revenue Department Instruction No. Por 110/2545 since they are international marine transportation business operators, whereby income from vessel rental is subject to withholding tax at a rate of 1%. Moreover, the subsidiaries are exempted from corporate income tax on their income from international marine transportation under Announcement of the Director-General of the Revenue Department No. 72.

29. 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.

The following table sets forth the computation of basic earnings per share:

Consolidated financial statements					
Profit for the year		Weighted average number of ordinary shares		Earnings per share	
<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share					
Profit attributable to equity holders of the Company					
2,219,712	3,591,824	1,578,362	1,577,909	1.41	2.28

Separate financial statements					
Profit for the year		Weighted average number of ordinary shares		Earnings per share	
<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share					
Profit attributable to equity holders of the Company					
1,553,582	2,486,062	1,578,362	1,577,909	0.98	1.58

30. Segment information

During the year, the Company increased of its shareholding in Thai Slurry Seal as described in Note 11 to the consolidated financial statements, then the Group considered to organize into business groups based on types of products and services. The major segments of the Group are as follows:

Manufacturing and trading

The Group conducts manufacturing and trading of asphalt, petroleum oil products and asphalt concrete in both domestic and overseas markets. Whereas, the marine logistic business complements the manufacturing and trading of asphalt and petroleum oil products.

Construction business

The Group conducts construction service related to highway construction and road rehabilitation in Thailand.

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.

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.

Revenue and profit information regarding the Groups operating segments for the years ended 31 December 2021 and 2020 are as follows:

(Unit: Million Baht)

	For the years ended 31 December							
	Manufacturing and trading segment		Construction segment		Eliminated transactions		Consolidated financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Revenues from external customers	24,447	26,155	2,606	-	-	-	27,053	26,155
Inter-segment revenues	591	-	-	-	(591)	-	-	-
Total revenues	<u>25,038</u>	<u>26,155</u>	<u>2,606</u>	<u>-</u>	<u>(591)</u>	<u>-</u>	<u>27,053</u>	<u>26,155</u>
Segment profit	<u>2,190</u>	<u>3,592</u>	<u>34</u>	<u>-</u>	<u>(4)</u>	<u>-</u>	<u>2,220</u>	<u>3,592</u>

Non-current assets (other than deferred tax assets-net)

(Unit: Million Baht)

	Geographic segment located in Thailand		Geographic segment located in overseas		Total	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Non-current assets	3,986	3,267	6,308	6,745	10,294	10,012

Transfer prices between the segments are as set out in Note 7 to the consolidate financial statements.

Revenue from external customers based on locations of the customers is as follows:

	(Unit: Million Baht)	
	<u>2021</u>	<u>2020</u>
Thailand	12,928	9,787
Overseas	14,125	16,368
Total	<u>27,053</u>	<u>26,155</u>

31. Dividend

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht per share)
Final dividends for 2019	Annual General Meeting of the shareholders on 7 April 2020	1,734.7	1.10
Interim dividends for 2020	Board of Directors Meeting on 17 August 2020	<u>473.5</u>	<u>0.30</u>
Total for 2020		<u>2,208.2</u>	<u>1.40</u>
Interim dividends for 2020	Board of Directors Meeting on 14 January 2021	473.5	0.30
Final dividends for 2020	Annual General Meeting of the shareholders on 8 April 2021	1,578.3	1.00
Interim dividends for 2021	Board of Directors Meeting on 11 August 2021	<u>394.6</u>	<u>0.25</u>
Total for 2021		<u>2,446.4</u>	<u>1.55</u>

32. Commitments and contingent liabilities

32.1 Capital commitment

As at 31 December 2021 and 2020, the Group had outstanding capital commitments relating to the purchase of machinery, equipment and construction of building, as follows:

Foreign currency	Consolidated financial statements		Separate financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(Million)	(Million)	(Million)	(Million)
Baht	6	23	5	15
Malaysian Ringgit	17	26	-	-
Vietnam Dong	7,805	5,755	-	-

32.2 Long-term service commitments

The Group has entered into service agreements. The terms of the agreements are generally between 1 and 5 years.

Future minimum service fees payable under these agreements as at 31 December 2021 were as follows:

	(Unit: Million Baht)	
	Consolidated financial statements	Separate financial statements
Within 1 year	40	22
2 to 5 years	10	8
Total	50	30

32.3 Long-term service agreement

The Group entered into service agreements with a related company related to management and marketing services, technical assistance in the manufacture of premium grade asphalt and construction project management. Those agreements have terms 2-5 years for which the Group is to pay fees at the rates stipulated in the agreements. The Group has fees for 2021 and 2020 amounted to approximately Baht 42 million and Baht 42 million, respectively (the Company only: Baht 29 million and Baht 42 million, respectively).

32.4 Project construction cost commitments

The Group has commitments related to agreements of project construction costs of Baht 2,078 million. The Group will make payment of these commitments upon delivery of the relevant goods or services.

32.5 Bank guarantees

As at 31 December 2021 and 2020, there were outstanding bank guarantees issued by the banks on behalf of the Group in respect of advance received, contractual performance and certain performance bonds as required in the normal course of business which are summarised below.

Foreign currency	Consolidated financial statements		Separate financial statements	
	2021 (Million)	2020 (Million)	2021 (Million)	2020 (Million)
Baht	2,019	3	2	2
Malaysian Ringgit	8	10	-	-
US Dollar	-	1	-	1

32.6 Tax assessment

An oversea subsidiary, of which investment cost is Baht 3 million, has been assessed by the authority on corporate income tax, withholding tax and value added tax by approximately USD 18 million (equivalent to Baht 593 million), covering the years 2008 - 2012 and 2014. The management has appointed an independence tax advisor to appeal the assessments and the independence tax advisor is of an opinion that the case is defensible. The Group's management believes that there will not be any significant loss resulting from the assessment in excess of the investment cost.

33. Financial instruments

33.1 Derivatives and hedge accounting

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Derivative assets				
Not designated as hedging instruments				
Commodity forward contracts	188,302	144,233	188,302	144,233
Forward exchange contracts	1,632	2,929	1,498	2,929
Total derivative assets	<u>189,934</u>	<u>147,162</u>	<u>189,800</u>	<u>147,162</u>
Derivative liabilities				
Not designated as hedging instruments				
Commodity forward contracts	192,241	452,564	192,241	452,564
Forward exchange contracts	3,179	1,253	3,179	804
Designated as hedging instruments				
Commodity forward contracts	41,791	113,717	41,791	113,717
Total derivative liabilities	<u>237,211</u>	<u>567,534</u>	<u>237,211</u>	<u>567,085</u>

All derivatives were measured at fair value in level 2.

Derivatives not designated as hedging instruments

The Group entered into commodity forward contracts and forward exchange contracts to manage against fluctuations in commodity prices and foreign exchange rates, respectively. The contracts are entered into for periods consistent with the underlying transaction, generally from one to 24 months.

Derivatives designated as hedging instruments

Cash flow hedges on commodity prices

The Group sells petroleum products produced from refining of crude oil and bitumen derived from crude oil distillation. The Group entered into commodity forward contracts to hedge against risks of petroleum price volatility in products expected to be sold in the future under risk management strategies established by the Group's Commodity Hedging Committee.

There is an economic relationship between the hedging instruments and the hedged items as the significant terms of the commodity forward contracts, i.e. notional amount and expected payment date, match those of the forecast sales (the expected highly probable forecast transactions). The Group has established a hedge ratio of 0.98:1 for the hedging relationships.

Hedge ineffectiveness can arise from:

- Differences in the timing of the cash flows of hedged items and hedging instruments
- Differences in commodity indexes of hedged items and hedging instruments
- Changes to the forecasted amount of cash flows of hedged items or hedging instruments

Derivatives held by the Group as hedging instruments as at 31 December 2021 are to mature within one year and carries an average hedge rate of USD 82.0 per barrels (2020: USD 47.9 per barrels).

The impact of hedged items on the statement of financial position as at 31 December 2021 and 2020 are, as follows:

(Unit: Thousand Baht)

	Change in		Cash flow hedge reserve			
	fair value used for		Continuing hedges		Discontinued hedges	
	measuring					
	ineffectiveness					
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Highly probable forecast sales	35,218	116,249	34,510	112,665	708	3,584

The impact of the hedging instruments on the statement of financial position as at 31 December 2021 and 2020 and the effect of the cash flow hedge in the statement of comprehensive income for the years ended 31 December 2021 and 2020 are, as follows:

(Unit: Million Baht)

		Consolidated and separate financial statements											
		Notional amounts		Carrying amount*		Changes in fair value used for measuring ineffectiveness		Effectiveness recognised in other comprehensive income		Ineffectiveness recognised in profit or loss**		Amount of cash flow hedge reserve reclassified to profit or loss***	
		2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Commodity forward contracts													
-	hedge the risk arising from petroleum products sales	461	584	(42)	(114)	(35)	(113)	(35)	(113)	-	-	(285)	(258)

* Presented in statement of financial position as derivative - commodity forward contracts.

** Presented in profit or loss as (gain) loss from commodity forward contracts.

*** Presented in profit or loss as deducted from sales and service income.

33.2 Financial risk management objectives and policies

The Group's financial instruments principally comprise cash and cash equivalents, trade and other receivables, trade and other payables, loans to and loans from related parties and financial institutions. 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 accounts receivable, loans, deposits with banks and financial institutions and other financial instruments. Except for derivatives, the maximum exposure to credit risk is limited to the carrying amounts as stated in the statement of financial position.

Trade receivables

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 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.

Financial instruments and cash deposits

The credit risk on debt instruments and derivatives is limited because the Group have a policy to consider and approve credit limits assigned to each counterparty by the Group's Board of Directors. The counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

Market risk

There are three types of market risk comprising interest rate risk, currency risk and commodity price risk. The Group enters into a variety of derivatives to manage its risk exposure, including:

- Commodity forward contracts to hedge the commodity price risk arising on sales of products
- Forward exchange contracts to hedge the foreign currency risk arising on the export or import of goods

Foreign currency risk

The Group's exposure to the foreign currency risk relates primarily to its trading transactions and borrowings that are denominated in foreign currencies. The Group seeks to reduce this risk by entering into forward exchange contracts when it considers appropriate. Generally, the forward contracts mature within one year.

As at 31 December 2021 and 2020, the balances of financial assets and liabilities of the Group denominated in foreign currencies are summarised below.

Foreign currency	Consolidated financial statements					
	Financial assets		Financial liabilities		Average exchange rate	
	as at 31 December		as at 31 December		as at 31 December	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(Million)	(Million)	(Million)	(Million)	(Baht per 1 foreign currency unit)	
US Dollar	16	33	48	64	33.4	30.0
Euro	-	-	-	1	37.9	36.9
Yen	-	-	-	7	0.3	0.3
Ringgit	20	15	20	23	8.0	7.4

Foreign currency	Separate financial statements					
	Financial assets		Financial liabilities		Average exchange rate	
	as at 31 December		as at 31 December		as at 31 December	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(Million)	(Million)	(Million)	(Million)	(Baht per 1 foreign currency unit)	
US Dollar	62	86	76	88	33.4	30.0
Singapore Dollar	-	-	7	-	24.7	22.7
Euro	-	-	-	1	37.9	36.9
Renminbi	48	50	-	-	5.3	4.6
Ringgit	-	-	7	7	8.0	7.4

The Group outstanding forward exchange contracts which maturity date within one year are summarised below.

As at 31 December 2021

Foreign currency	Consolidated financial statements		Separate financial statements		Contractual exchange rate	
	Sold amount	Bought amount	Sold amount	Bought amount	Sold	Bought
	(Million)	(Million)	(Million)	(Million)	(Per 1 foreign currency unit)	
US Dollar	16	12	16	12	32.8 - 33.7 Baht	32.8 - 33.7 Baht
US Dollar	-	3	-	-	-	22,910 Vietnam Dong
US Dollar	-	3	-	-	-	14,298 - 14,460 Indonesia Rupiah

As at 31 December 2020

Foreign currency	Consolidated financial statements		Separate financial statements		Contractual exchange rate	
	Sold amount	Bought amount	Sold amount	Bought amount	Sold	Bought
	(Million)	(Million)	(Million)	(Million)	(Per 1 foreign currency unit)	
US Dollar	39	3	39	3	29.9 - 30.4 Baht	30.1 - 30.4 Baht
US Dollar	-	5	-	-	-	23,138 - 23,215 Vietnam Dong
US Dollar	-	6	-	-	-	14,200 - 14,853 Indonesia Rupiah

In addition, the Group exposed to foreign exchange risk on their investments in overseas subsidiaries, joint ventures and associates, loans to overseas subsidiaries and loan from financial institution. These investments and loans are currently not hedged by derivative financial instruments.

The following tables demonstrate the sensitivity of the Group's profit before tax to a reasonably possible change in US dollar exchange rate, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities including non-designated foreign currency derivatives as at 31 December 2021 and 2020. The Group's exposure to foreign currency changes for all other currencies is not material.

Currency	2021		2020	
	Change in FX rate	Effect on profit before tax (Thousand Baht)	Change in FX rate	Effect on profit before tax (Thousand Baht)
US dollar	+1%	(11,526)	+1%	(17,694)
	-1%	11,526	-1%	17,694

Interest rate risk

The Group exposure to interest rate risk relates primarily to its cash at banks, loans to and loans from related parties and financial institutions. However, since most of the Group's financial assets and liabilities bear fixed interest rates which are close to the market rate, the interest rate risk is expected to be minimal.

The following table demonstrates the sensitivity of the Group's profit before tax to a reasonably possible change in interest rates on loans from financial institutions affected as at 31 December 2021 and 2020.

	2021		2020	
	Increase/decrease	Effect on profit before tax (Thousand Baht)	Increase/decrease	Effect on profit before tax (Thousand Baht)
Interest rate	+1%	(2,065)	+1%	(1,260)
	-1%	2,065	-1%	1,260

Commodity price risk

The Group is exposed to risk from fluctuations in the price of raw materials and finished goods. To manage these risks, the Group has entered into commodity forward contracts to hedge the risk from fluctuation in such prices.

The Group's Commodity Hedging Committee has developed and enacted a risk management strategy for commodity price risk and its mitigation. Based on a 12-month forecast sales, the Group hedges the selling price using commodity forward contracts. The forward contracts do not result in physical delivery of commodity products, but hedge the risk from fluctuation in commodity prices to offset the effect of price changes in commodity.

Forward contracts with a physical delivery that qualify for normal purchase, sale or usage are therefore not recognised as derivatives.

Commodity price sensitivity

The following table demonstrates the sensitivity of the Group's profit before tax and equity to a reasonably possible change in commodity price, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of commodity forward contracts are as follow:

	2021			2020		
	Increase/decrease	Effect on profit before tax (Thousand Baht)	Effect on equity (Thousand Baht)	Increase/decrease	Effect on profit before tax (Thousand Baht)	Effect on equity (Thousand Baht)
Crude price	+1%	(466)	-	+1%	(6,068)	-
	-1%	466	-	-1%	6,068	-
Petroleum price	+1%	(10,780)	(5,032)	+1%	(14,646)	(6,978)
	-1%	10,780	5,032	-1%	14,646	6,978

Liquidity risk

The Group implements liquidity risk management procedures through the use of loans from financial institutions and leases. The Group assesses the risk relating to its ability to repay as low since the Group has access to sufficient and varied sources of funding and ability to request an extension to the repayment period for debts due within 12 months.

The table below summarises the maturity profile of the Group's non-derivative financial liabilities and derivative financial instruments as at 31 December 2021 based on contractual undiscounted cash flows:

(Unit: Thousand Baht)

	Consolidated financial statements			
	Less than 1	1 to 5	> 5 years	Total
	year	years		
Non-derivatives				
Short-term loans from financial institutions	3,787,554	-	-	3,787,554
Trade and other payables	3,031,598	-	-	3,031,598
Lease liabilities	129,315	255,256	114,127	498,698
Long-term loan from related party	-	-	6,789	6,789
Total non-derivatives	6,948,467	255,256	120,916	7,324,639
Derivatives				
Derivative liabilities - commodity forward contracts	562,560	3,722	-	566,282

(Unit: Thousand Baht)

	Separate financial statements			
	Less than	1 to 5	> 5 years	Total
	1 year	years		
Non-derivatives				
Short-term loans from financial institutions	3,106,753	-	-	3,106,753
Trade and other payables	4,835,908	-	-	4,835,908
Lease liabilities	27,437	66,717	19,205	113,359
Total non-derivatives	7,970,098	66,717	19,205	8,056,020
Derivatives				
Derivative liabilities - commodity forward contracts	562,560	3,722	-	566,282

33.3 Fair value of financial instruments

Since the majority of the Group's financial instruments 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 statement of financial position. For derivatives, fair value is generally derived from quoted market prices, or based on generally accepted pricing models when no market price is available.

34. Capital management

The primary objective of the capital management of the Group is to ensure that they have an appropriate financial structure and preserve the ability to continue their business as a going concern.

The Group manages its capital position with reference to financial ratio. As at 31 December 2021 and 2020, these financial ratios were as follow:

Financial Ratio	Consolidated		Separate	
	financial statements		financial statements	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Interest Bearing Short-term Debt-to-Equity Ratio	0.214 : 1	0.105 : 1	0.288 : 1	0.122 : 1

35. Approval of financial statements

These financial statements were authorised for issue by the Company's authorised directors on 10 February 2022.

Attachment 1

Details of directors, executives, controlling persons, the person assigned to take the highest responsibility in accounting and finance, the person assigned to take direct responsibility for accounting supervision, the Company's secretary.

MR. CHAINOI PUANKOSOOM

CHAIRMAN

INDEPENDENT DIRECTOR

Age 71

Starting date of Directorship 13 August 2015

Education

- Master of Management (MM), Sasin Graduate Institute of Business Administration, Chulalongkorn University
- Bachelor Degree in Higher Accounting, California College of Commerce, USA

Training

- 2021 Chairman Forum 1/2021 "Chairing a Virtual Board meeting"
- 2017 The Role of Chairman in Leading Strategic Risk Oversight
- 2014 The Role of the Chairman Program (RCP), Class 33/2014
- 2011 Financial Institutions Governance Program (FGP), Class 3/2011
- 2007 Director Accreditation Program (DAP), Class 63/2007

Shareholding in Company

Director 5,000 (0.0003%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

2020 - Present	Chairman, Independent Director Tipco Asphalt Plc.
2018 - Feb 2020	Vice Chairman, Tipco Asphalt Plc.
2017 - Present	Chairman, Independent Director, Member of Audit Committee, Chairman of Compensation and Nomination Committee and Chairman of Corporate Governance and Sustainable Development Committee, Frasers Property (Thailand) Plc. (Type of business : Industrial Factory and Warehouse Development for Sale and Lease)
2016 - Present	Independent Director, Chairman of the Audit Committee, Member of the Nomination, Remuneration and Corporate Governance Committee, Prima Marine Plc. (Type of business : Providing Marine Transportation and Services)
2015 - Present	Independent Director, Tipco Asphalt Plc.
2016 - 2017	Chairman, Tipco Asphalt Plc.

Non-Listed Companies

2017 - Present	Independent Director, Chairman of the Audit Committee, Sapthip Company Limited. (Type of business : Producing Ethanol)
2017 - Present	Chairman of the Board of Directors, TRA Land Development Co., Ltd. (Type of business : Property Development)
2010 - Present	Director, Member of Executive Committee, Member of Risk Management Committee and Member of Business Restructuring Subcommittee, National Power Supply Plc. (Type of business : Electricity and Steam Generation and Sale)

MR. KOH BAN HENG

VICE CHAIRMAN

INDEPENDENT DIRECTOR

MEMBER OF THE NOMINATION AND REMUNERATION COMMITTEE

Age 73

Starting date of Directorship 1 July 2011

Education

- Post-Graduate Diploma in Business Administration, University of Singapore
- Bachelor Degree of Applied Chemistry, University of Singapore

Training

- 2019 SMU-SID Executive Certificate in Directorship program
- 2019 Leaders Insights with Economist Intelligence Unit
- 2019 Grow Beyond Talk 2019 on August 23, 2019
- 2018 Cybersecurity Governance, KCL Group
- 2017 Leaders Insights - "Outlook for the Global Economies" by The Economist Intelligence Unit
- 2017 SID's AC Chapter - Pit Stop Series on "The Critical Role of ACs in Valuation and Impairment of Assets"
- 2017 Governance, Risk, Compliance and Safety Program
- 2017 Seminar on audit committee, ACRA, SGX and Singapore Institutes of Directors
- 2016 Building a High Impact Board, Singapore Institutes of Directors
- 2016 Cybersecurity for Directors, Singapore Institutes of Directors
- 2016 Competition Law and Corporate Governance, KCL GRC

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2020 – Present	Vice Chairman, Tipco Asphalt Plc.
2011 – Present	Independent Director, Tipco Asphalt Plc.
2021 – Present	Independent Director, Dialog Systems Asian Pte Ltd (Type of business : Chemical production)
2016 – 2017	Vice Chairman, Tipco Asphalt Plc.

Non-Listed Company

2014 – Present	Director, Chung Cheng High School Ltd. (Type of business : Education)
2011 – Present	Advisor, Malaysian KLSE listed company Dialog Group Bhd. (Type of business : Integrated specialist technical services provider midstream and upstream in the oil, gas and petrochemical industry)
2015 – 2021	Independent Director and non-executive Chairman and Member of Audit Committee, Keppel Infrastructure Trust (Type of business : Trustee manager of Keppel infrastructure Trust)
2013 – 2019	Director and Chairman of Audit Committee, Keppel Infrastructure Holdings Pte. Ltd. (Type of business : Investment holding company)
2015 – 2018	Director and Chairman of Audit Committee, Cue Energy Resources Limited (Type of business : Oil and Gas exploration and production)

Attachment 1

MS. LAKSANA SUPSAKORN

AUTHORIZED DIRECTOR

Age 69

Starting date of Directorship 15 August 2013

Education

- Master Degree of Business Administration, Wharton Business School, University of Pennsylvania, USA
- Bachelor Degree of Accounting (Honor), Chulalongkorn University

Training

- 2014 Director Certification Program (DCP)
- 2014 Role of the Chairman Program (RCP)
- 2012 Director Accreditation Program (DAP)

Shareholding in Company

Director 13,860,000 shares (0.878%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives

Sister of Mr. Sitilarb Supsakorn and sister-in-law of Mr. Somchit Serththin

Related Experience

Listed Company

2013 – Present	Director, Tipco Asphalt Plc.
2013 – Present	Chairman, Tipco Foods Plc. (Type of business : Manufacturer and exporter of canned pineapple and fruit juices)
2018 – 2020	Chairman, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

MR. PHIRASILP SUBHAPHOLSIRI

INDEPENDENT DIRECTOR

CHAIRMAN OF THE AUDIT COMMITTEE

CHAIRMAN OF THE CORPORATE GOVERNANCE COMMITTEE

Age 68

Starting date of Directorship 14 May 2013

Education

- Bachelor Degree of Business Administration, Yokohama National University, Japan

Training

- 2005 Director Accreditation Program (DAP)

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2013 – Present	Independent Director, Tipco Asphalt Plc.
2009 – Present	Chairman, Food and Drinks Plc. (Type of business : Manufacturer of food and beverages)

Non-Listed Company

2019 – Present	Director, HMC Polymers Co., Ltd. (Type of business : Manufacturer of Polypropylene Grades)
2010 – Present	Chairman, Kaizen Consulting Co., Ltd. (Type of business : Consulting service)
2009 – Present	Chairman, Thai-Nichi Ventures Co., Ltd. (Type of business : Consulting service)
1989 – Present	Chairman, Subhadhana Co., Ltd. (Type of business : Office for rent)

Attachment 1

MR. NOPPORN THEPSITHAR

INDEPENDENT DIRECTOR

MEMBER OF THE AUDIT COMMITTEE

CHAIRMAN OF THE NOMINATION AND REMUNERATION COMMITTEE

Age 68

Starting date of Directorship 27 April 2012

Education

- Ph.D (Honorable) in Logistics and Supply Chain Management, Sripatum University
- Bachelor Degree of Electrical Engineering, Chulalongkorn University

Training

- 2021 Advanced Audit Committee Program (AACP 41/2021)
- 2021 Ethical Leadership Program (ELP 22/2021)
- 2021 AC seminar FY2021
- 2020 Risk Management Program for Corporate Leaders (RCL 21/2020)
- 2020 Strategic Board Master Class (SBM 9/2020)
- 2020 Board Nomination and Compensation Program (BNCP 10/2020)
- 2020 IT Governance and Cyber Resilience Program (ITG 15/2020)
- 2018 Corporate Governance for Director and Top Executive of State-owned Enterprise and Public Organization, Class 19 King Prachadhipok' Institute
- 2018 Congko Business Dinner Talk King Mongkut's Institute of Technology, Ladkrabang
- 2018 Sale Credit skills Development senior Credit EXIM Bank and Omega Performance Corporation
- 2012 Audit Committee Effectiveness Seminar
- 2005 Director Accreditation Program (DAP)

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2012 – Present	Independent Director, Tipco Asphalt Plc.
2011 – Present	Independent Director, Member of Audit Committee and Chairman of Risk Management Committee, Ananda Development Plc. (Type of business : Property development)
2005 – 2018	Independent Director and Chairman Audit Committee, Union Petrochemical Plc. (Type of business : Importer and distributor of petrochemical products)

Non-Listed Company

2018 – Present	Advisor, Thai National Shippers' Council (TNSC)
2018 – Present	Chairman, Mena Transport Plc. (Type of business : Logistics)
2014 – 2019	Director and Chairman of the Board of Executive Director, Export-Import Bank of Thailand (EXIM Thailand) (Type of business : Import and export service)
2013 – 2017	Chairman of the Thai National Shippers' Council (TNSC)

MR. JEAN –MARIE VERBRUGGHE

DIRECTOR

Age 71

Starting date of Directorship 7 April 2020

Education

- Engineer at Solvay Business School – Brussels, Belgium

Training

- 2021 Director Certification Program (DCP 313/2021)

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2020 – Present Director Tipco Asphalt Plc.

Non-Listed Company

Present	Non Executive Director of Bouygues-Thai Ltd. Non Executive Director of BYMA (Myanmar) Advisor to Bouygues-Thai Board. (Type of business : Building Construction)
1994 – 2018	Managing Director BOUYGUES - THAI LIMITED, Nonthaburi, Thailand (Type of business : Building Construction)
1992 – 1994	General Manager BOUYGUES - THAI LIMITED, Nonthaburi, Thailand (Type of business : Building Construction)
1989 – 1991	Project Manager – Butter & Powder Milk Turnkey Project BOUYGUES ZIMBABWE (Type of business : Building Construction)
1987 – 1989	Far East Financial Manager DRAGAGES ET TRAVAUX PUBLICS
1985 – 1988	Deputy Managing Director BOUYGUES NIGERIA
1985 – 1987	Branch Manager BOUYGUES IRAQ
1980 – 1985	Administrative & Financial Manager BOUYGUES IRAQ
1977 – 1980	Head of Heavy Lifting & Transport Division - Onshore KHALIFA CO./ CONOCO - CHAD
1974 – 1977	Expert UNIDO – CHAD

Attachment 1

MR. NIPHON SUTHIMAI

INDEPENDENT DIRECTOR

MEMBER OF THE AUDIT COMMITTEE

MEMBER OF THE CORPORATE GOVERNANCE COMMITTEE

Age 63

Starting date of Directorship 16 February 2006

Education

- Master Degree of Operational Research, London School of Economics, UK
- Licence de Droit (Law), Universite de Droit, Lyon, France

Training

- 2020 Board Nomination and Compensation Program (BNCP 10/2020)
- 2017 Updated COSO Enterprise Risk Management: Integrating with Strategy and Performance
- 2015 CG Forum 3/2015 Risk Oversight: High Priority Roles of the Board
- 2006 Audit Committee Program (ACP)
- 2006 Director Accreditation Program (DAP)

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2006 – Present	Independent Director, Tipco Asphalt Plc.
2017 – 2018	Vice President Corporate Affairs and Corporate Risk Management Acting Cargo Sales Director, Nok Airlines Plc. (Type of business : Airline service)
2016 – 2017	Vice President - Customer Services, Nok Airlines Plc. (Type of business: Airline service)
2012 – 2015	Vice President - People, Nok Airlines Plc. (Type of business : Airline service)
2006 – 2016	Chairman of Audit Committee, Tipco Asphalt Plc.

Non-Listed Company

1999 – 2019	Associate Director, Geodis Overseas Co., Ltd. (Type of business : Logistics service)
2007 – 2013	Managing Partner, CLY International Limited (Type of business : Human resources consulting service)
2005 – 2008	Consultant, Thai Air Cargo Co., Ltd. (Type of business: Air freight service)

MR. SOMCHIT SERTTHIN

AUTHORIZED DIRECTOR

MEMBER OF THE NOMINATION AND REMUNERATION COMMITTEE

Age 69

Starting date of Directorship 29 April 1994

Education

- Bachelor Degree of Business Administration, Babson College, Massachusetts, MA, USA

Training

- 2014 National Director Conference
- 2014 Anti – Corruption for Executive Program (ACEP)
- 2013 Director Certification Program (DCP)
- 2003 Director Accreditation Program (DAP)

Shareholding in Company

Director 31,000,000 shares (1.964%)

Spouse/Minor child 10,000,000 shares (0.634%)

Family Relationship with Other Directors and Executives

Brother-in-law of Ms. Laksana Supsakorn and Mr. Sitalarb Supsakorn

Related Experience

Listed Company

2005 – Nov 2019	Director, Tipco Foods Plc. (Type of business : manufacturer and exporter of canned pineapple and fruit juices)
1994 – Present	Director, Tipco Asphalt Plc.
1986 – Aug 2019	Chief Executive Officer, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

Attachment 1

MR. FREDERIC GARDES

AUTHORIZED DIRECTOR

Age 50

Starting date of Directorship 11 May 2018

Education

- Master of Business Administration, Bocconi University (Milano) Italy
- Bachelor Degree of Engineering, Ecole Centrale de Paris and the Royal Institute of Technology in Stockholm

Training -none-

Shareholding in Company

Director -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2019 – Present	Chairman and Chief Executive Officer, Colas Group (Type of business : Road construction)
2018 – Present	Director, Tipco Asphalt Plc.
2018 – 2019	International Managing Director, Colas Group
2015 – 2018	Deputy General Manager – Northern Europe and Middle East, Colas Group
2013 – 2015	Regional Director – Indian Ocean Area, Colas Group

Non-Listed Company

2011 – 2013	Director of GTOI, Colas subsidiary, Reunion island (Type of business : Road construction)
2002 – 2011	Project Director, Saipem, Russia, Italy, France (Type of business : Oil and Gas)
1994 – 2002	Project Engineer, Bouygues Offshore, Nigeria, Russia (Type of business : Oil and Gas)

MR. JACQUES PASTOR

AUTHORIZED DIRECTOR

MEMBER OF THE EXECUTIVE COMMITTEE

MEMBER OF THE NOMINATION AND REMUNERATION COMMITTEE

Age 67

Starting date of Directorship 1 August 2000

Education

- Advanced Management Program (AMP), Harvard Business School, MA, USA
- Ecole Nationale Supérieure d' Arts et Metiers, PARIS, FRANCE

Training

- 2013 Director Accreditation Program (DCP)
- 2013 Director Certification Program (DAP)

Shareholding in Company

Director 1,200,000 shares (0.105%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2000 - Present Director, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

2020 - Present CEO COLAS ASIA, PACIFIC, SOUTH AMERICA and BITUMEN GROUP
(Type of business : Asphalt Consulting Service)

1993 – 2019 CEO COLAS ASIA and PACIFIC

1989 – 1992 Managing Director COLAS AJMC, Mauritius Island

1986 – 1989 Managing Director COLAS MAYOTTE, Comoro Island

1983 – 1986 Managing Director COLAS GTR, Morocco

1980 – 1983 Operation Manager COLAS GUINEA BISSAO, West Africa

1978 – 1980 Operation Manager COLAS TOGO and BENIN, West Africa

Attachment 1

MR. CHAIWAT SRIVALWAT

AUTHORIZED DIRECTOR

MEMBER OF THE EXECUTIVE COMMITTEE

MEMBER OF THE CORPORATE GOVERNANCE COMMITTEE

CHIEF EXECUTIVE OFFICER

Age 61

Starting date of Directorship 13 February 2002

Education

- Bachelor Degree of Engineering, Liverpool University, England

Training

- 2021 IOD Director Forum 1/2021 “GRC Through the Perfect Storm”
- 2019 CEO Club 2019 : “Global and Corporate Sustainability & ESG: the Next Phase of Growth”
- 2017 Sustainability Strategy : Key Blueprint for Business Growth
- 2014 National Director Conference
- 2014 Anti-Corruption for Executive Program (ACEP)
- 2003 Director Certification Program (DCP)

Shareholding in Company

Director 3,000,000 shares (0.190%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

Aug 2019 – Present	Chief Executive Officer, Tipco Asphalt Plc.
2002 – Aug 2019	Managing Director, Tipco Asphalt Plc.
1999 – 2002	Marketing Director, Tipco Asphalt Plc.
1995 – 1998	Senior Marketing Manager, Tipco Asphalt Plc.
1993 – 1995	Senior Plant Manager, Tipco Asphalt Plc.
1992	Group Plant Manager, Tipco Asphalt Plc.
1983 – 1991	Plant Manager, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

MR. JACQUES MARECHAL

AUTHORIZED DIRECTOR

MEMBER OF THE EXECUTIVE COMMITTEE

MEMBER OF THE CORPORATE GOVERNANCE COMMITTEE

Age 56

Starting date of Directorship 27 April 2012

Education

- Master Degree of Corporate Finance, Dauphine University
- Bachelor in Business administration in Nantes Business school (France)
- Bachelor Degree of Corporate Finance, Dauphine University

Training

- 2014 Director Certification Program (DCP)
- 2013 Director Accreditation Program (DAP)

Shareholding in Company

Director 1,200,000 shares (0.076%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2012 – Present	Director, Tipco Asphalt Plc.
2000 – 2011	International Finance Manager, COLAS SA, Paris, France (Type of business : Road construction service)
1996 – 2000	Deputy International Finance Manager, COLAS SA, Paris, France (Type of business : Road construction service)

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

Attachment 1

MR. SITILARB SUPSAKORN

AUTHORIZED DIRECTOR

MEMBER OF THE EXECUTIVE COMMITTEE

Age 70

Starting date of Directorship 25 April 2001

Education

- Bachelor Degree of Business Administration, Babson College, Massachusetts, USA

Training

- 2012 Director Accreditation Program (DAP)

Shareholding in Company

Director 17,250,000 shares (1.093%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives

Brother of Ms. Laksana Supsakorn and elder brother-in-law of Mr. Somchit Sertthin

Related Experience

Listed Company

2012 – Present	Director, Tipco Foods Plc. (Type of business : Manufacturer and exporter of canned pineapple and fruit juices)
2001 – Present	Director, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

MR. HUGUES DE CHAMPS

AUTHORIZED DIRECTOR

MEMBER OF THE EXECUTIVE COMMITTEE

DEPUTY CHIEF EXECUTIVE OFFICER – INTERNATIONAL BUSINESS

Age 53

Starting date of Directorship 17 February 2020

Education

- Master's degree of Public and Maritime Works, University of Nantes
- Bachelor of Civil Engineering Option, University of Technology

Training

- 2015 Director Accreditation Program (DCP)
- 2013 Director Certification Program (DAP)

Shareholding in Company

Director 405,000 shares (0.026%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2020 – Present	Director, Tipco Asphalt Plc.
2019 – Present	Deputy Chief Executive Officer – International Business, Tipco Asphalt Plc.
2017 – 2019	Chief Operating Officer – International Wholesale, Tipco Asphalt Plc.
2014 – 2016	Chief Operating Officer – International, Tipco Asphalt Plc.
2011 – 2013	Director, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

2011 – Present	Operations Manager, Colas Asia area
2004 – 2011	Managing Director, COLAS South Africa (Pty) Ltd.
1995 – 2004	Operations Manager, COLAS Asia area
1990 – 1994	Project Manager, COLAS France, Morocco, India

Attachment 1

EXECUTIVE OFFICES

MRS. KANYA RUENGPRADEEPSANG

MEMBER OF THE EXECUTIVE COMMITTEE

CHIEF FINANCIAL OFFICER

The person assigned to take the highest responsibility in Accounting and Finance

Age 56

Education

- 1995 Master's degree in science, Majoring Computer Information System (MS CIS), Assumption University (ABAC)
- 1988 Bachelor of Arts in Accounting (B.A.A), Assumption University (ABAC)

Training

- 2021 CFO Refresher 2/2021 by the Stock Exchange of Thailand CPD 6 hour
- 2021 CFO Professional Development Program No. 2,3,4 and 6 by Thai Listed Companies Association CPD 8 hour
- 2021 Independent Director Forum
- 2021 CFO's Orientation Course for New IPOs 5/2021 by the Stock Exchange of Thailand CPD 9 hour
- 2020 International Oil Trading
- 2020 Refining Economics by Conference Connection
- 2019 Capital Market Leader Program 2019, Capital Market Academy 29/2019
- 2018 Design Thinking, SEAC – Stanford Executive Program
- 2017 Leading in Disruptive World Program, Stanford Executive Program in Action #5 Adaptive Organization Design and Winning through Value Chain Innovation, Stanford University, USA
- 2011 Director Certification Program (DCP142/2011)
Audit Committee Program (ACT35/2011)
Monitoring the Internal Audit Function (MIA11/2011)
Monitoring Fraud Risk Management (MFM6/2011)
Monitoring the System of Internal Control and Risk Management (MIR12/2011)
Monitoring the Quality of Financial Reporting (MFR) by Thai Institute of Directors
- 2009 Executive Development Program (EDP4/2009) by Thai Listed Companies Association

Shareholding in Company

Executive Officer 120,000 (0.008%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

Mar 2021 - Present Chief Financial Officer, Tipco Asphalt Plc.

2020 – 2021 Deputy Chief Financial Officer, Tipco Asphalt Plc.

Non-Listed Company

2015 – 2020 Chief Financial Officer, The Minor Food Group Plc.
(Type of business : Food and Beverage)

2008 – 2014 Vice President of Finance, The Minor Food Group Plc.

2003 – 2008 General Manager, Minor DQ Limited (Subsidiary of MFG)
(Type of business : Food and Beverage)

1999 – 2003 Finance Director, The Minor Food Group Plc. – The Pizza Company
(Type of business : Food and Beverage)

MR. THIERRY ALAIN SIMON DEFRENE

MEMBER OF THE EXECUTIVE COMMITTEE

CHIEF OPERATING OFFICER – LOGISTICS AND PROCUREMENT

Age 51

Education

- Bachelor of Engineering (Civil Engineering), ALES Mining school, France

Shareholding in Company

Executive Officer 50,000 shares (0.003%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2019 – Present	Chief Operating Officer – Logistics and Procurement, Tipco Asphalt Plc.
2017 – 2019	Chief Operating Officer – International Trading and Business Development, Tipco Asphalt Plc.
2005 – 2011	International Sales & Marketing Director, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

2012 – 2017	Chief Executive Officer, COLAS Australia Group (Pty) Ltd. – Australia (Type of business : Road construction services)
2000 – 2004	Managing Director, COLAS South Africa (Pty) Ltd. – South Africa (Type of business : Road construction services)
1998 – 1999	Managing Director, COLAS East Africa Ltd. – Kenya (Type of business : Road construction services)

Attachment 1

MR. CHRISTOPHE BERNARD VOY
MEMBER OF THE EXECUTIVE COMMITTEE
CHIEF OPERATING OFFICER – INTERNATIONAL BUSINESS

Age 55

Education

- Institute of Management Bouygues (IMB), HEC, France
- Bachelor of Business Administration, SDSU, USA

Training

- 2014 Director Certification Program (DCP)

Shareholding in Company

Executive Officer -none-

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experiences

Listed Company

2020 – Present Chief Operating Officer – International Business, Tipco Asphalt Plc.

2016 – 2019 Chief Operating Officer – International Retail, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

2007 – 2015 President Director, Colas Companies in Indonesia, Vietnam & Singapore
(Type of business : Road construction service)

2005 – 2006 Marketing Director, North & Central Europe, Shell International
(Type of business : Oil and Gas)

2001 – 2004 Marketing Director, specialties, Asia Pacific, Shell Oil Products
(Type of business : Oil and Gas)

1997 – 2000 General Director, Shell Bitumen Vietnam
(Type of business : Oil & gas)

1995 – 1996 Business Development Manager, Shell Vietnam (Downstream)
(Type of business : Oil and Gas)

MR. SORANARD NANTAMONTRY

MEMBER OF THE EXECUTIVE COMMITTEE

CHIEF OPERATING OFFICE – THAILAND BUSINESS

Age 48

Education

- Master of Business Administration, Saint Louis University, Missouri, USA
- Bachelor of Engineering (Civil Engineering), Chulalongkorn University

Training

- 2021 Executive Development Program (EDP 2021) Thai Listed Companies Association
- 2019 Director Certification Program (DCP 283/2019)

Shareholding in Company

Management 428,500 shares (0.027%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

Aug 2021 – Present	Chief Operating Office – Thailand Business Tipco Asphalt Plc.
Jun – Aug 2021	Chief Operating Officer – International Business Tipco Asphalt Plc.
2015 – 2021	Director – International Sales & Marketing, Tipco Asphalt Plc.
2014	Plant Manager – Nakornratchasima, Tipco Asphalt Plc.
2012 – 2013	Senior Manager – Domestic Asphalt Product Sales, Tipco Asphalt Plc.
2010 – 2012	Group Manager – International Sales and Marketing, Tipco Asphalt Plc
2001 – 2004	Senior Technical Officer, Tipco Asphalt Plc.

Non-Listed Companies

Please see list of directorship in non-listed companies on Attachment 2

2004 – 2010	Marketing Manager, Kemaman Bitumen Company Sdn. Bhd. (Malaysia) (Type of business : Asphalt refinery)
1995 – 2001	Civil Engineer, Thanomwongse Service Co., Ltd. (Type of business : Road construction and maintenance service)

Attachment 1

MRS. UDOMPORN PUNPATCH

CHIEF PEOPLE OFFICE

Age 60

Education

- Master of Human Resources Management, College of Management, Mahidol University
- Mini-Master of Business Administration, Thammasat University
- Bachelor of Industrial Psychology, Chaingmai University

Training

- Asia Women's forum during 18-20 September 2019

Shareholding in Company

Management 1,135,900 shares (0.072%)

Spouse/Minor child 23,100 shares (0.0015%)

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

2021 – Present	Chief People Office – Tipco Asphalt Plc.
2011 – 2021	Director – Human Capital Management, Tipco Asphalt Plc.
2007 – 2010	Senior Manager – Human Resources, Tipco Asphalt Plc.
2000 – 2006	Group Manager – Human Resources, Tipco Asphalt Plc.

Non-Listed Companies -none-

Notice: the directors, executives and controlling persons during the past five years on account of wrongful acts under the SEA B.E. 2535 (1992) or the Derivatives Act B.E. 2546 (2003): -None-

MS. AUCHCHA RATTRAKULTIP

DIRECTOR – CORPORATE FINANCE

Age 74

Education

- Mini MBA Economics, Business Administration
- Mini MBA Commerce and Accounting, Business Administration Kasetsart University

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2002 – Present	Director – Corporate Finance, Tipco Asphalt Plc.
2001 – 2002	Senior Manager, Tipco Asphalt Plc.

Non-Listed Company -none-

MR. CHANCHAI LOHAPRATARN

DIRECTOR – DOMESTIC SALES AND MARKETING

Age 54

Education

- Master of Business Administration, Victoria University, Melbourne, Australia
- Bachelor of Science, B.Sc., (Civil Engineer), Prince of Songkla University

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

2017 – Present Director – Domestic Sales and Marketing, Tipco Asphalt Plc.
2000 – 2006 Technical Sale Manager, Siam City Cement Plc.

Non-Listed Companies

2012 – 2016 Vice President (Sale & Service), Siam Hitachi Elevator Co., Ltd.
2011 – 2012 Managing Director, Bangkok Komatsu Sales Co., Ltd.
2008 – 2011 Managing Director, Pidilite Bamco Limited
2006 – 2008 COO, Siam City Concrete Ltd.

MR. SUPHAT PIPITAWAN

DIRECTOR – OPERATIONS

Age 52

Education

- Bachelor of Engineering, King Mongkut Institute of Technology – Ladkrabang Campus

Training

- Total Productive Maintenance, TPM Master Company Limited

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

2016 – Present Director – Operations, Tipco Asphalt Plc.

Non-Listed Companies

2001 – 2015 Plant Manager, Guardian Thailand
(Type of business : Manufacturer of float glass and fabricated glass products)

Attachment 1

MRS. PUNSIRI SUTTIENKUL

DIRECTOR – CORPORATE BRANDING AND CORPORATE SOCIAL RESPONSIBILITY

Age 62

Education

- Master of Landscape Architecture, University of Pennsylvania, USA
- Bachelor of Architecture, Silpakorn University

Training

- 2020 Preliminary to Corporate Sustainability by Stock Exchange of Thailand
- 2020 Corporate Sustainability Strategy by Stock Exchange of Thailand
- 2020 Sustainability Risk and Materiality Analysis by Stock Exchange of Thailand
- 2020 Sustainability Evaluation & Data Management by Stock Exchange of Thailand
- 2020 Sustainability Reporting by Stock Exchange of Thailand

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Companies

2016 – Present	Corporate Branding and Corporate Social Responsibility Director, Tipco Asphalt Plc.
2014 – 2016	Domestic Sales and Marketing Director, Tipco Asphalt Plc.
2011 – 2012	President Asia Pacific & Global Branding, Mahaphant Fibre-Cement PLC (Type of business : Manufacturers of fibre cement products)

Non-Listed Companies

2013 – 2014	Country Director, Villeroy & Boch (Thailand) Co., Ltd. (Type of business : Manufacturer and distributor of sanitary ware)
2009 – 2010	General Manager, Grohe (Thailand) Limited (Type of business : Manufacturer of sanitary fittings)

MR. MARTIN STANISLAW BRZUSKA

DIRECTOR – MARINE BUSINESS

Age 55

Education

- Master of Science (MSc) higher than bachelor Navigation Engineering (Marchant Marine Navigation & Engineering), Kultusministerium Bayern, MUNICH, Germany (Anerkenung)

Family Relationship with Other Directors and Executives -none-

Related Experience

Listed Company

2021 – Present	Director - Marin Business, Tipco Asphalt Plc.
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Non-Listed Company

2017 – 2021	Head of Marine Assurance, DPA, Management representative BW EPIC COSAN, Singapore (Type of business: Road construction services)
2015 – 2017	Global Managing Director, TSQ HSEQ TEEKAY SHIPPING Singapore (Type of business: Road construction services)
2012 – 2015	Senior Manger HSEQ Vetting, Teekay Norway, Stavanger, Norway (Type of business: Road construction services)

MRS. NATTAMON INGKAPRADIT

Senior Manager - Financial Accounting

Qualified bookkeeper and the conditions of being an accountant according to the criteria specified in the announcement of the Department of Business Development

Age 39

Education

- Master of Business Administration Faculty of Commerce and Accountancy Thammasat University
- Bachelor of Accounting, Faculty of Commerce and Accountancy Chulalongkorn University

Training

- 2021
 - Course "Cash Flow" (CPD 6 hours) by Department of Business Development
 - TFRS 9 Financial Instruments – Impairment (Simplified approach)" (CPD 3.5 hours) by EY Office Limited
 - Summary key point to be aware for TFRS for PAEs and changes in 2021 by The Stock Exchange of Thailand
 - Trends, direction of doing M&A, important issues to consider and M&A strategy by The Stock Exchange of Thailand
- 2020
 - Disclosure form and transfer pricing criteria (CPD 7 hours) by Sanpakornsarn (Unit under the Revenue Department)
 - "Update overall TFRS 9 and TFRS 16" (CPD 6 hours) by Federation of Accounting Professions Under The Royal Patronage of His Majesty The King
- 2019
 - Draft Conceptual framework for financial reporting - Revised Edition (CPD 3 hours)
 - Thai Financial Reporting Standards Revised 2019 (BV 2019) with Revised/Added Principles (8 editions) (CPD 6 hours) by Federation of Accounting Professions Under The Royal Patronage of His Majesty The King
 - "The new financial reporting standards to be used in 2019 and 2020" (CPD 6 hours) by Federation of Accounting Professions Under The Royal Patronage of His Majesty The King

Shareholding in Company - none -

Family Relationship with Other Directors and Executives - none -

Related Experience

Jun 2018 – Present	Senior Manager - Financial Accounting, Tipco Asphalt Plc.
2017 – 2018	Senior Manager, EY Office limited
2011 – 2017	Manager, EY Office limited

MR. THANAPOL LAOSIRIPONG

COMPANY SECRETARY

Age 37

Education

- MBA Program, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Bachelor of Engineering, King Mongkut's Institute of Technology, Ladkrabang

Training

- 2021 ESG Showcase: "ESG integration for sustainability" Thai Listed Companies Association (TLCA)
- 2021 IR Sharing 3/2021
- 2021 IR Sharing 2/2021
- 2020 CGR workshop 2/2020, Thai Institute of Directors (IOD)
- 2020 CAC Open House - Checklist 4.0, Thai Institute of Directors (IOD)
- 2020 IR Role Thai Listed Companies Association (TLCA)

Attachment 1

- 2020 Smart Disclosure Program (SDP) No.1/2020
- 2019 CGR Workshop 2019, Thai Institute of Directors
- 2018 Inaugural Corporate Governance Conference 2018, Bangkok
- 2017 Sustainable Investment: Opportunity of Long Term Growth for Businesses and Investors
- 2016 Anti-corruption: The Practical Guide (ACPG)
- 2015 CG Forum 3/2015 “Risk Oversight“
- 2014 Company Secretary Program (CSP)

Shareholding in Company - none –

Family Relationship with Other Directors and Executives - none -

Related Experience

Listed Companies

2015 - Present	Company Secretary - Corporate Affairs and Planning, Tipco Asphalt Plc.
2014 - 2015	Senior Officer - Corporate Affairs and Strategy, Tipco Asphalt Plc.
2012 - 2014	Senior Officer - Strategist for international business, Siam Commercial Bank (Type of business: Banking)

Non-Listed Companies -None-

ROLES OF THE COMPANY SECRETARY

The Company Secretary has the following important roles:

- Act as a consultant and secretary to the Board of Directors and other committees;
- Act as a corporate governance and compliance Officer;
- Act as a corporate communication officer by being the center of communication among the Company’s directors, management and stakeholders;
- Act as a controller of management functions in following up on all the resolutions of the board of directors into practice; and
- Act as a coordinator with the Stock Exchange of Thailand, The Securities and Exchange Commission, and other relevant organizations

DUTIES OF THE COMPANY SECRETARY:

- To adhere to good corporate governance;
- To plan meetings and propose relevant agendas;
- To manage the Board of Directors’ meetings and coordinate with the minutes recorder in conducting the meetings in a proper manner and in line with the Company’s regulations;
- To administer the Shareholders’ meetings in line within the legal framework;
- To give advices on legal matters, the Public Companies Act and all other rules and regulations of listed companies, and the Company’s affidavits aiming at full compliance with relevant laws;
- To make sure that the resolutions of the Board of Directors are adhered to;
- To be a point of contact providing information to Directors and third parties; and
- To maintain the safekeeping of all matters concerning the Company’s registrar and related documents.

Attachment 3

Details of the Head of Internal Audit

Mr. Joseph Mugilen Soosay Manickam

Senior Manager - Internal Audit Department

Age 49

Professional Qualifications

- 2000 Chartered Management Accountant (from the Chartered Institute of Management Accountants, United Kingdom)
- 2002 Certified Internal Auditor (from the Institute of Internal Auditors, United States of America)

Related Experience

- 2012 – Present Senior Manager - Internal Audit Department, Tipco Asphalt Plc.
- 2008 – 2012 Associate Director - Advisory Services, PricewaterhouseCoopers FAS Ltd.

Attachment 4

Assets used in the business operation

Fixed asset of the Company and subsidiaries as of 31 December 2021

Type of asset	Net Book value (THB million)	Ownership	Collateral
Land including:	254.65		
- Nakhon Ratchasima plant (Area: 31 Rai-71 Sq.wa)	34.70	Company	None
- Phitsanulok plant (Area: 29 Rai-14 Sq.wa)	9.43	Company	None
- Phra pradaeng plant (Area: 13 Rai-2 Ngan-5 Sq.wa)	143.76	Company	None
- Suratthani plant (Area: 48 Rai-1 Ngan-78.4 Sq.wa)	51.54	Company	None
- Rayong plant (Area: 22 Rai- 2 Ngan-38.6 Sq.wa)	15.22	Subsidiary	None
Land development	111.66		None
Building and property	462.13	Company and subsidiaries	None
Machinery and equipment	3,939.61		None
Furniture, office equipment and vehicle	485.69		None
Vessels	2,568.56		Subsidiaries
Sub-total	7,822.30		
Property under construction	427.90	Company and subsidiaries	None
Total	8,250.20		

1/ Fixed assets with contingent liabilities have a net book value of 345.08 million baht.

Attachment 4

Intangible Assets

Intangible asset of the Company and subsidiaries include:

	Net Book value (THB thousand)	Remark
Computer software	43,938	Straight Line Depreciation: 5 years
Customer relationship	133,183	Straight Line Depreciation: 8-29 years
Backloga	89,263	Straight Line Depreciation: 3-4 years

Lease

The Company and subsidiaries have lease contracts for use in operation. Lease term is between 1-50 years.

	Net Book value (THB thousand)	Remark
Land and building	529,498	<p>Straight Line Depreciation: 1-50 years</p> <p>As of 31 December 2021, the Company and subsidiaries have lease agreement which the Company made advance rental payment of Baht 279.13 million in aggregate with following details:</p> <ul style="list-style-type: none">- Three subsidiaries in China entered into land lease agreement with 30 year, 50 year and 45 year term. The contracts will be due in 2029, 2050 and 2055 and those subsidiaries made advance rental payment of Chinese yuan 15.1 million.- Three subsidiaries in China entered into land lease agreement with 50 year term. The contracts will be due in 2055 and 2063 and those subsidiaries made advance rental payment Ringgit 30.8 million.- Subsidiaries in Vietnam entered into land lease agreement with 20 year term until 2032. A subsidiary made advance rental payment Vietnamese Dong 36,257 million.

	Net Book value (THB thousand)	Remark
Machinery and equipment	123,546	Straight Line Depreciation: 5-17 years
Vehicle	74,608	Straight Line Depreciation: 3-6 years
Office equipment	998	Straight Line Depreciation: 3 years

investment policies on the subsidiaries and associated companies

Investment policy take into account various factors including objective of the investment which shall be in line with Vision and Mission of the Group on good corporate governance manner.

Attachment 5

Unabridged policy and guidelines on corporate governance and unabridged code of business conduct

1. The Company has defined the corporate governance policy for the Board of Directors, all executives and employees to adhere to as a guiding principle in their work.
 - Corporate Governance Policy: <https://www.tipcoasphalt.com/corporate-governance/>
 - Code of Ethics: <https://www.tipcoasphalt.com/corporate-governance/code-of-ethics/>
2. Role and responsibilities of the Board of Directors and sub committees
 - **Board of Directors**
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/>
 - **Audit Committee**
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/audit-committee/>
 - **Corporate Governance Committee**
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/corporate-governance-committee/> (Sustainable Development and Corporate Governance Committee)
 - **Nomination and Remuneration Committee**
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/nomination-remuneration-committee/>
 - **Executive Committee**
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/executive-committee/>



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