

**56-1 ONE REPORT
2022**

TAKING OFF TO THE FUTURE



TIPCO ASPHALT PUBLIC COMPANY LIMITED

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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

2022 was the year that Tipco Asphalt Public Company Limited and its subsidiaries showed resilience through the ability to continually manage key challenges that included feedstock supply for asphalt production issue and crude price volatility due to the geopolitical conflict between Russia and Ukraine. The Company and its subsidiaries managed to register a total revenue of Baht 33,401 million, and a net profit of Baht 2,367 million which grew from those in 2021 by 23.5% and 6.6%, respectively.

Such commendable result was achieved through a combination of the achievement to purchase other feedstocks in replacement of Venezuela crude, and ability to increase asphalt procurement from Asia-Pacific and other regions. Assisted by our own ocean-going asphalt tanker fleet and ample terminal storage capacity, the Company was able to procure additional asphalt at suitable price and appropriate timeframe especially when there was wide discrepancy in asphalt selling price between Europe and Asia. In addition, the effective selective market sales strategy amidst reduced asphalt supply stabilized our gross profit and market share for long term growth. This is the key driver for the Company's performance in term of stable sales volume and strong margins.

As for the construction business, the Group was able to integrate Thai Slurry Seal Co. Ltd., our 62.5% owned construction subsidiary, 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". The Group took a lead on the 1st Fibroseal, a new technic of micro-surfacing upgraded with glass fibers, contract launched by the Expressway Authority of Thailand (EXAT) for micro-surfacing works for the maintenance of the expressway pavements. The construction of the 3rd runway of the Suvarnabhumi International Airport has had good progress and entered into the stage of asphalt pavement works. Revenue from the construction business, in turn, posted strong growth and accounted for approximately 10% of the Company's total revenue.

In our commitment to sustainable development and corporate governance and, the Company has received many honorable awards including the Sustainability Disclosure Award in 2022 for four consecutive years; the "Excellent" CG scoring (5-star) accorded by the IOD for five consecutive years; and recertification of Private Sector Collective Action against Corruption (CAC) since 2020.

In summary, the Group's performance was highly praiseworthy for the strong return to shareholders and management results. It is my pleasure to inform that the Board has proposed to the 2023 Annual General Meeting for approval of a total dividend payment of Baht 1.25 per share, equating to a full year payout ratio of 83% of net consolidated profit of the Group. This high dividend payout ratio once again confirmed



our ability and commitment to distribute the highest possible total return to our shareholders.

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" (Group's core value) attitude in performing their duties are all very much appreciated.

A handwritten signature in black ink, appearing to read "Chainoi Puankosoom".

MR. CHAINOI PUANKOSOOM
Chairman

FINANCIAL HIGHLIGHTS

Unit : Million Baht	2018	2019	2020	2021	2022
Financial Highlights					
Total Revenue ^{1/}	27,742	37,026	26,291	27,210	33,638
Gross Profit	2,364	4,174	5,555	3,882	4,361
EBITDA ^{2/}	2,443	3,940	5,591	4,009	4,525
Net Profit	564	3,123	3,592	2,220	2,367
Assets	24,253	25,262	21,334	24,801	26,257
Liabilities	11,716	11,683	6,314	8,864	9,465
Shareholders' Equity	12,537	13,579	15,021	15,937	16,792
Financial Ratio					
Total number of shares issued (shares)	1,573,821,570	1,576,763,070	1,578,361,570	1,578,361,570	1,578,361,570
Book value per share (Baht)	7.87	8.50	9.40	9.74	10.28
Earnings per share (Baht)	0.36	1.98	2.28	1.41	1.50
Dividends per share (Baht)	0.30	1.50	1.60	1.05	1.25 ^{3/}
Net profit margin (%) ^{4/}	2.09%	8.50%	13.68%	8.28%	7.08%
Return on equity (%)	4.48%	24.22%	25.43%	14.70%	14.98%
Return on assets (%)	4.50%	15.59%	19.25%	13.54%	12.67%
Debt to Equity Ratio	0.93	0.86	0.42	0.56	0.56

^{1/} Include other income

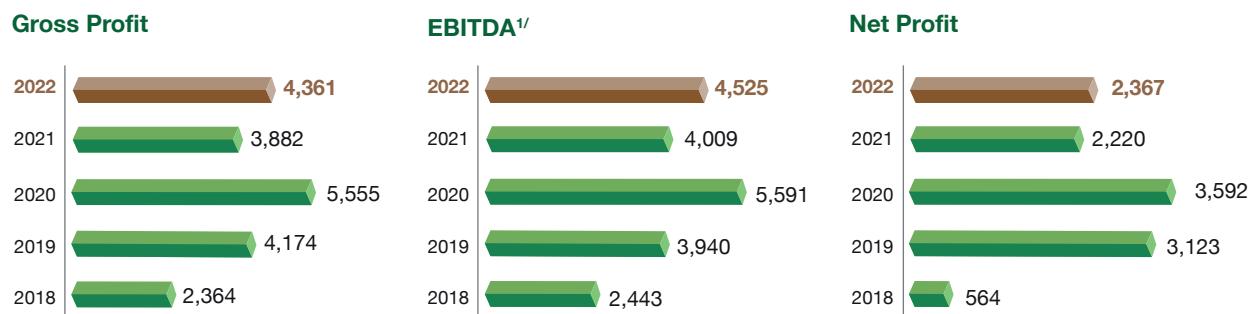
^{2/} Equal to profit from operating activities before change in operating assets and liabilities of financial statements

^{3/} Final dividend of 1.00 Baht per share is subjected to approval at 2023 Annual General Meeting

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

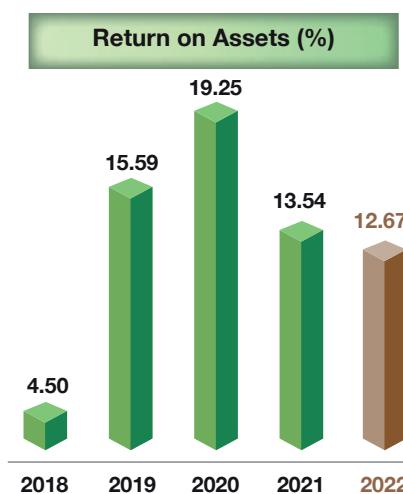
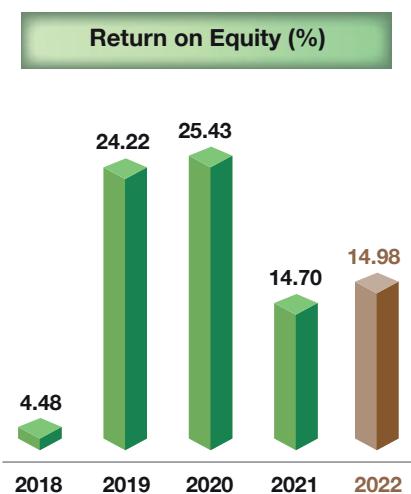
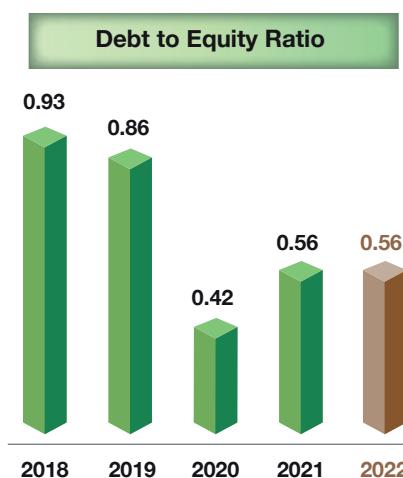
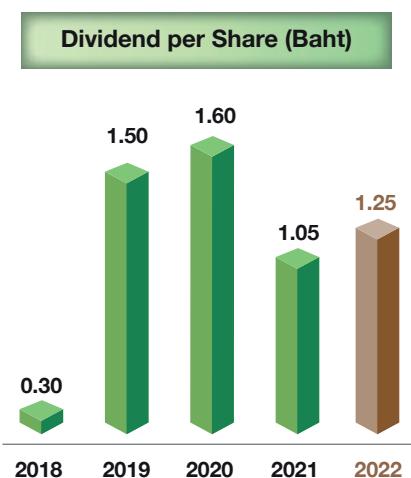
^{5/} Exchange rate in 2018, 2019, 2020, 2021 and 2022 were 32.31, 31.05, 31.29, 31.98 and 35.07 Baht per USD, respectively

FINANCIAL HIGHLIGHTS (THB MILLION)



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

FINANCIAL RATIOS





PART 1

BUSINESS OPERATION AND PERFORMANCE

- ▲ Organizational structure and operation of the Group
- ▲ Risk management
- ▲ Business sustainability development
- ▲ Management discussion and analysis (MD&A)
- ▲ General information and other material facts

**PART
1**

BUSINESS OPERATION AND PERFORMANCE

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 corporate strategic plan focuses on the formulation of our Mission/Vision statements, 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 Group re-aligns our strategies every 12 - 18 months, with a full review every 4 - 5 years.

The current corporate strategic 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 top management and the Board of Directors.

The Group conducts strategic reviews every 12-18 months, to ensure our high resiliency in the face of any potential risks or new market shocks. 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 formulated a corporate strategy divided into 6 goals/objectives, while also integrating sustainability into their design. Our current 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 organizationto improve the efficiency of our processes and services

4. **“Client Centric”** One of the Group’s core goals is to exceed customers’ expectations by anticipating 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 supported 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.

Innovative Culture

Under Vision 2025, the Group aims to instill an innovative culture within the organization. Innovation is one of the ways we pursue 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. Innovation Policy can be found in Attachment 5.

BOARD OF DIRECTORS AND CORPORATE STRATEGY

The Board of Directors plays a crucial role not only in the formulation of the Group’s Mission and Vision, but also in monitoring its progress. As part of the formulation, the Company worked with an external consultant to advise us on factors we should consider while developing our Mission, Vision 2025, and Strategic Goals. 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, there was a post 200-days workshop strategy review meeting where the revised 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 by the Corporate Strategy team, with progress reports presented to the Board of Directors for their acknowledgement and suggestions.

Every year, strategic initiatives under Vision 2025 plan will be reviewed to ensure they are executed properly and accommodate strategic goals. In 2022, top management conducted its annual Vision 2025 strategic review meeting in which each strategic goals and initiative progress were fully discussed to ensure their continued success. It was agreed that some of the strategic initiatives that were no longer relevant would be replaced. Key global trends and macroeconomic developments were also taken into account while some new strategic initiatives were proposed during the meeting. The strategic review results were then reported to the Executive Committee, and ultimately submitted to the Board of Directors for their acknowledgement and approval.



The results from these corporate strategy review sessions are also communicated across the Group to ensure all staff members fully understand the Group's strategic direction. This then means all

employees can then revise their corresponding operation/business plans and targets (both financial and non-financial) accordingly.

1.1.2 Major changes or developments in 2020 - 2022

2020

The year started with weak demand in the international wholesale markets, mainly due to the economic lockdowns in many countries in response to the Covid-19 pandemic. Nonetheless, the Group's domestic sales turned in another stellar performance with strong growth in volume and margins in Q2-Q3 2020, following the rushed disbursement of the government budget which was delayed from Q4 2019. Amid surging demand, domestic price of asphalt products was pushed up by the tight supply at domestic and regional refineries. With ample asphalt stock from the Group's KBC asphalt refinery in Malaysia, we were able to meet the robust demand of the domestic market easily. In addition, there was healthy growth in other international retail markets such as Vietnam and Cambodia, where our subsidiaries reported good growth in sales and profitability.

In 2020, the Group had its 2nd best ever historical performance. However, the Group faced a major challenge due to the disruption of crude oil supply

from our regular supplier in Venezuela as a result of economic sanctions imposed by the USA. The Company notified the Stock Exchange of Thailand as follows:

- 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.

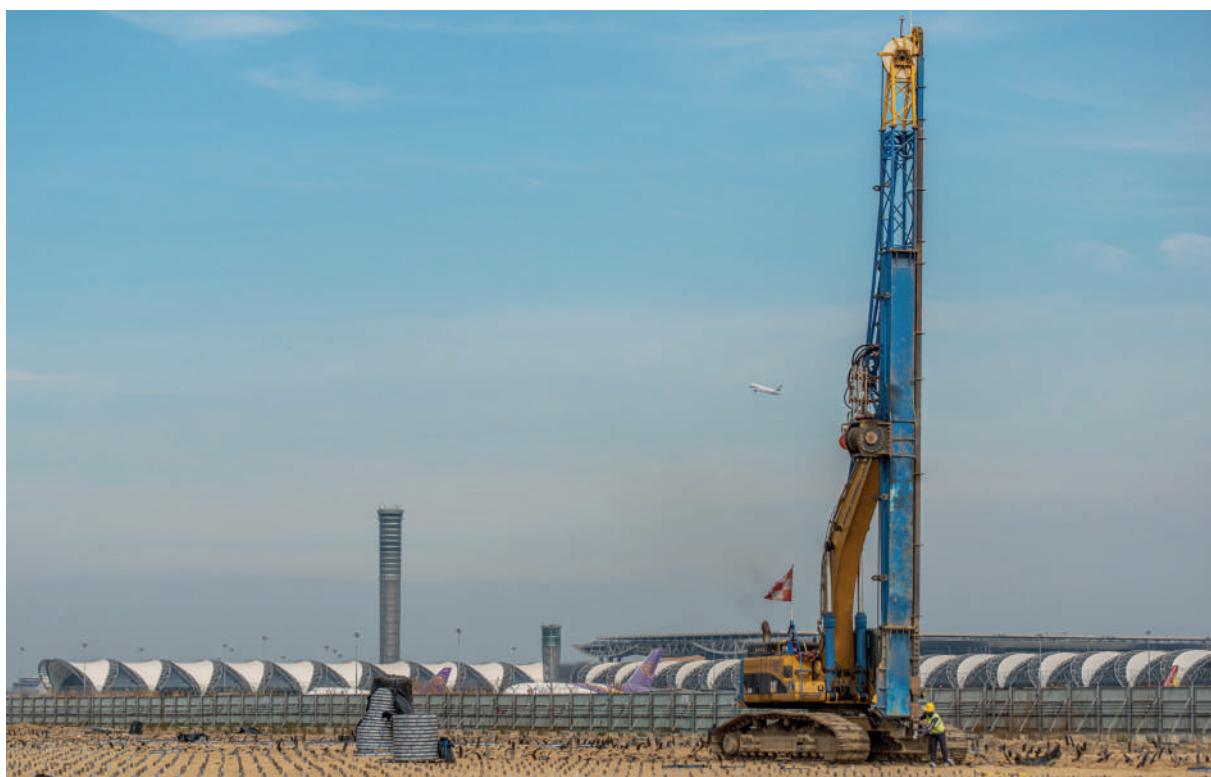
2021

The year 2021 was very challenging for Tipco Asphalt Public Company Limited and its subsidiaries. The impact of the Covid-19 pandemic and related restrictions delayed road maintenance and construction activities in many countries. The effect of the continued rise in crude demand and price, driven by world economic recovery, on the cost of asphalt production was further aggravated by the restriction of crude import from Venezuela since the end of 2020.

The Group managed to secure alternative feedstocks from other sources and refineries but this was still insufficient for our requirement. This resulted in a tight asphalt supply situation and the Group subsequently devised a “selective market strategy” to focus on selling to markets with higher margins rather than sales volumes.

Realizing the necessity to expand our 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 TSS with a total shareholding of 62.5%. Following this acquisition, the Company was able to integrate TSS as part of our marketing arm to introduce and market new value-added asphalt products and new paving techniques under the banner of the Tipco Asphalt Group. By strengthening our sales force and combining this with our extensive knowledge of the product, technology and most importantly customer concerns and requirements, the Company is convinced that this will result in higher asphalt sales volumes going forward. 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.



2022

In the wake of the geopolitical conflict between Russia and Ukraine, 2022 saw a surge in crude prices, which remained very high compared to the previous year. Asphalt selling prices in both domestic and international markets have started to increase in line with crude oil prices in Q2/2022 and remained high until the end of the year. In terms of asphalt supply, the Company has managed to secure alternative feedstocks and has been able to purchase large volumes of asphalt from other refineries in the region. The Company has also been able to procure asphalt from Europe by capitalizing on arbitrage between asphalt selling prices in Europe and Asia in Q4/2022. Strong asphalt selling prices and effective selective market strategy were key factors for the Company's strong performance.

The Company notified the Stock Exchange of Thailand that Tasco International (Hong Kong) Ltd (TIH), a wholly owned subsidiary of the Company, disposed of its investment in Zhenjiang Tipco Asphalt Co., Ltd. (ZJ). The Group has continued to focus on retail markets in China.

The construction business has started to "Take off to the future". Major projects such as the construction of the 3rd runway of the Suvarnabhumi International Airport have entered the phase of asphalt paving. This contributed to growing and consistent revenue from the Group's construction business.





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 the repair, maintenance and construction of 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 2022, domestic and international sales volumes contributed to approximately 44% and 56% of total sales volumes, respectively. 87.79% of total revenue came from sales of asphalt and petroleum related products.

Based on the Company's consolidated financial statements for the years 2020, 2021 and 2022, revenues categorized by companies were as follows:

	Shareholding (%)	2020		2021		2022	
		Unit million	%	Unit million	%	Unit million	%
1. Asphalt and Petroleum Related Business							
Tipco Asphalt PLC.	-	18,059.76	68.52	15,243.77	55.89	18,304.38	54.28
Thai Bitumen Co., Ltd.	99.99	1,426.10	5.41	1,722.74	6.32	1,761.37	5.22
Raycol Asphalt Co., Ltd.	99.99	535.78	2.03	504.38	1.85	642.10	1.90
Ravana 1020 Co., Ltd. ^{1/}	99.99	-	-	1.77	0.01	75.47	0.22
Tipco Asphalt (Cambodia) Co., Ltd.	100.00	568.80	2.16	617.89	2.27	816.68	2.42
KOC and KBC and subsidiaries	100.00	1,270.48	4.82	1,311.86	4.81	893.39	2.65
TIH and subsidiaries	100.00	1,285.93	4.88	1,558.15	5.71	1,061.12	3.15
Highway Resources Pte Ltd. and subsidiaries	100.00	1,969.98	7.47	2,162.65	7.93	4,029.24	11.95
PT Asphalt Bangun Sarana Group	99.99	868.48	3.30	1,045.80	3.83	1,788.31	5.30
Tipco Asphalt Lao Co., Ltd.	75.00	159.17	0.60	101.16	0.37	235.13	0.70
Total		26,144.48	99.20	24,270.17	88.98	29,607.19	87.79
2. Marine Group							
Tipco Maritime Co., Ltd.	99.99	3.03	0.01	2.55	0.01	2.59	0.01
Delta Shipping Co., Ltd.	99.99	-	-	-	-	-	-
Alpha Maritime Co., Ltd.	99.99	160.86	0.61	226.24	0.83	263.36	0.78
Bitumen Marine Co., Ltd.	99.99	267.53	1.02	276.65	1.01	350.84	1.04
Tasco Shipping Co., Ltd.	99.99	342.09	1.30	349.47	1.28	396.72	1.18
AD Shipping Pte. Ltd.	100.00	251.00	0.95	102.41	0.38	150.94	0.45
Reta link Pte. Ltd.	100.00	1,176.94	4.47	341.26	1.25	-	-
Pacific Bitumen Shipping Pte. Ltd.	100.00	242.66	0.92	268.38	0.98	325.84	0.97
Elimination		(2,433.32)	(9.23)	(1,557.88)	(5.71)	(1,420.71)	(4.21)
Total		10.79	0.04	9.08	0.03	69.58	0.22
3. Construction Group							
Thai Slurry Seal Co., Ltd. (TSS)	62.50	-	-	403.98	1.48	505.51	1.50
Thanomwong Service Co., Ltd. (99.99 by TSS)		-	-	2,369.55	8.69	3,218.25	9.54
Total		-	-	2,773.53	10.17	3,723.76	11.04
Total Sales and service income		26,155.27	99.24	27,052.78	99.18	33,400.53	99.05
Other Revenue income		200.14	0.76	223.88	0.82	321.86	0.95
Total income		26,355.41	100.00	27,276.66	100.00	33,722.39	100.00

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

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 heavy crude oil to produce AC, which provides approximately 75% yield. There are various grades of asphalt cement which are AC 20-30, AC 40-50, AC 60-70 and AC 80-100. The quality of hard penetration AC, especially AC 30-40 and AC 40-50 from our refinery, has a superior quality than AC from other oil refineries. As a result, it enhances road performance significantly.
- Asphalt Emulsion (AE) is a homogenous mixture of AC, water and chemicals. AE is applied at normal temperature and is environmentally friendly as water in AE evaporates into the atmosphere and AC continuously forms up as a thin film covering the aggregate or road surface. The Company offers various grades of AE for different applications. Emulsified Asphalt Prime (EAP) was developed to replace Cutback Asphalt as it penetrates into the base course deeper and faster. As the result, the road surface can be re-opened to users in a much shorter period.
- Cutback Asphalt (CB) is a mixture of AC and petroleum solvents. It is used mainly for prime coating on the base course and for some road maintenance works. Nonetheless, CB has become less popular due to its high costs, fire hazard, and causing considerable environmental impact as solvent evaporates into the atmosphere.
- Polymer Modified Asphalt (PMA) is a premium-grade asphalt mixture of AC and polymer compounds. PMA quality is superior to that of conventional AC in terms of its higher softening point, elastic recovery, cohesion, toughness and tenacity. These characteristics give greater rutting resistance and extend the useful life of roads, highways and airport runways.
- Natural Rubber Modified Asphalt Cement (Para AC) is a mixture of AC and concentrated natural latex. Para AC is better suited for road construction and maintenance in areas with high traffic density. The Company was the first to successfully manufacture Para AC by using concentrated natural latex with Ultra-low Ammonia. This reduces odor and eliminates pollution during the production and application stages.
- Modified Asphalt Emulsion (Modified AE) is a mixture of AE and concentrated latex. One of the various applications of modified AE is Para Slurry Seal whose key features include higher skidding resistance and durability on road surfaces, meaning it can extend the service life of roads and ultimately enhance road safety. Modified AE is now used in a new road surfacing maintenance technique called FIBROSEAL which is developed from micro-surfacing by adding fiberglass. FIBROSEAL reduces the loosening of aggregate, provide much higher skidding resistance thereby extending the useful life of the road. The Company offers various grades of Modified AE, e.g. CRS-1P, CRS-2P and CMS-2hP which boast a superior quality than normal AE.

Product	Key characteristic & Application/Usage
Hard penetration asphalt cement: - AC 20-30, AC 30-40 and AC 40-50	For strong, durable, and high rutting resistant hot-mixed asphalt (HMA). Suitable for construction and maintenance projects with high traffic volumes such as highways, airport runways and taxiways.
Performance Asphalt Emulsion - EAP	Easy to use, quick surface drying and deep penetration for prime coat application, to enhance the cohesion on the sub-base layer.
Polymer Modified Asphalt - PMA - PG76	Used in very strong, durable and high rutting-resistant HMA. Suitable for highways, especially the thin layer pavement application e.g. Ultra-Thin Friction Course (UTFC) and also for Porous Asphalt wearing course, specifically designed to enhance the safety, improve drainage ability of road surface and increases friction index for high-traffic roads. Used in performance HMA which is very strong, durable and withstands high temperatures, also resists deformation and rutting. Perfect for airport runway and taxiway construction.
Modified Asphalt Emulsion - CSS-1hP or CSS-1h (EMA)	Used for Para Slurry Seal and Fibroseal to increase skid resistance and prolong the service life of road surfaces. Suitable for scheduled maintenance road surface applications such as highways, rural roads, intercity highways, expressways, or elevated roads.
<ul style="list-style-type: none"> - Tipco Premix is an instant, ready-mixed, ready-for-use product that is sold in 20 kg retail packages. Tipco Premix is made from selected aggregates with proper gradation, AE and some additives. Tipco Premix is ideal for road surface repairs, pothole repairs, speed-hump and other small road projects. - Tipco Joint Sealer refers to AC mixed with polymer, which offers extra bonding and durability under extreme weather conditions. Tipco Joint Sealer exhibits high flexibility while strongly adhering to concrete-joint surfaces. Used with Tipco Joint Primer, Tipco Joint 	<p>Sealer performs exceptionally well in sealing joints between concrete slabs. "Top Joint" is another of the Company's Joint Sealers, also designed for general usage.</p> <ul style="list-style-type: none"> - Petroleum products: Kerosene, Naphtha, Atmospheric Gas Oil (AGO) and Vacuum Gas Oil (VGO) are by-products from our refinery (KBC) in Malaysia. These products are distributed directly to customers in the Asia Pacific region for further blending and refining processes.

1.2.2.1 Marketing and competition

ASPHALT REFINERY AND OPERATIONS IN MALAYSIA

The Asphalt refinery owned and operated by Tipco Asphalt through its Malaysian subsidiary, Kemaman Bitumen Company Sdn. Bhd. has a design capacity to process 30,000 barrel/day of high TAN (Total Acid Number), heavy crude oil and produce various grades of high-quality Asphalt, Atmospheric Gas Oil (AGO), Vacuum Gas Oil (VGO), Kerosene and Naphtha. In 2022, the KBC refinery processed 2.89 million barrels of feedstock and produced 329,400 tons of high-quality Asphalt and 122,900 tons of non-Asphalt products. The throughput has been expectedly low, in view of the restricted availability of suitable feedstock for the refinery.

Notwithstanding the current shortfall in the refinery production, the KBC refinery remains at the center of Tipco Asphalt's strategic plans. The Plant is capable of producing high quality premium grade asphalt that yield much higher margins compared to trading volumes sourced from other refineries. The company was able to secure a few cargos of suitable alternative feedstock during the year and the production was strategically targeted towards select retail markets that consume these premium grades and give higher margins. During the year 2022, the refinery also procured and commissioned a pilot plant sized distillation unit, giving it the ability to test and assess in-house the different feedstock options under consideration. This was reduce reliance on external facilities for feedstock testing and allowed the refinery to significantly reduce the trial to production cycle time for new feedstocks. Going forward, this investment is expected to serve the refinery well and improve flexibility.



In keeping with Tipco Asphalt's focus on the future, the KBC team worked towards ensuring the refinery remained ready to service the Group's requirements. The Plant operated at a high reliability rate of 99.83% during the year, reflecting the same standards as those achieved in the past. 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 relevant agencies up to 1st September 2024. The latest Occupational Health and Safety Management System Certification under ISO 45001:2018 achieved by the KBC in September 2020 is also valid until 3rd September 2024.

In other actions towards improving the safety operation of the refinery, the KBC team continued to close out all the recommendations emanating out of the Fire Safety Design Philosophy (FSDP) Review that was undertaken in the preceding years under the guidance and supervision of the Malaysian Fire-safety Department (BOMBA), with the help of

internationally accredited consultants. All ongoing projects to implement the FSDP recommendations were completed in 2022. These actions have led to significant all-round improvements in the refinery's safety procedures, preparedness, and infrastructure.



While the impact of Covid-19 gradually lessened in 2022, the Malaysian Asphalt market remained sluggish in the year, impacted also by increased cheaper imports from across the border and other surplus markets. Road construction activity in the country continued to be affected and local retail sales were also impacted as the Tipco Asphalt Group tried to balance all its international sales commitments against the limited product availability from the KBC refinery and product availability for local Malaysian market was very limited. As such, the domestic sales volumes in Malaysia dropped to 42,330 metric tons

in the year. However, the joint venture company established by KBC in the State of Sarawak, Borneo Asphalt Sdn Bhd (BASB), continued its good performance run and has carved out a nearly one-third of market share in the competitive southern Sarawak market, with sales of 17,750 metric tons in a trying year and under difficult conditions. BASB was the proud recipient of the Sarawak Chief Minister's Industry Excellence Gold Award under the 'Small' Category for its good performance and at the same time obtained the coveted ISO 9001:2015 and ISO 14001:2015 certifications.

THAILAND MARKET

In 2022, the overall demand for asphalt products in Thailand was around 1.35 million tons. Many challenging factors affected a slight decrease in demand in 2021. The main reason was that budget allocation for road construction in 2022 was significantly reduced due to the Covid-19 pandemic and the government needed to apportion a lot of its budget to handle the situation. However, Tipco Asphalt performed remarkably well in the Thailand market in terms of meeting customer needs.

Every year the Company conducts face-to-face interviews with customers regarding our products and services to ensure we serve their needs effectively. Once again, the results from the customer survey 2022 confirm that Tipco Asphalt continues to deliver the best quality products and services to its customers, with high levels of customer satisfaction in product quality and services standing at 92% and 90% respectively. We also conducted additional surveys at the delivery points to measure our delivery services, which also returned good feedback and recommendations for improvement.

We continue to improve our customer-centric services by taking the needs and expectations of customers from the survey and various channels to develop and improve our services. In addition to addressing requests from customers for troubleshooting or technical support, our technical service team has been carrying out pre-determined technical programs



in which we proactively provide a variety of technical knowledge and assistance to customers for their future benefit in a sustainable manner. The sales and operations teams merged forces to provide value-added services by sharing with customers knowledge on operational safety, production efficiency and preventive maintenance, on regular basis. These unique services confirm our position as the asphalt leader in Thailand.

Apart from a variety of asphalt products covering a wide range of asphalt road applications, the Company aims to become an innovative solution partner for its customers by expanding its offering to meet unfulfilled customers' needs. With its current technology, the Company can adopt a tailor-made digital platform to provide our customers with more convenience and accessibility to transact or contact for various requirements including logistic services with real-time monitoring and tracking systems.





We keep developing our logistic system for more safety, quality, and efficiency to improve customer satisfaction levels. In 2022, we achieved a new record of on-time delivery, which exceeded 99% for delivery performance for the whole year. We also invested in a new transportation management control system which will give us more precise control of our delivery services and increase the efficiency of our logistic management.

In our commitment to sustainable development, the Company is delighted to announce that our Phitsanulok plant has been awarded the Green Industry GI5 certification from The Ministry of Industries. Our Phitsanulok plant is the first factory in Phitsanulok and the third factory in the northern region to have received the highest recognition in sustainable development, reflecting our strong commitment to being environmentally friendly. Moreover, 4 of our 5 plants in Thailand have been awarded the Green Industry GI 4 certifications and we are working towards getting GI 5 certification by the year 2024.

Construction Business

After a sharp increase in its revenue since 2021, thanks to the development of the Construction Business in the Northern region along with the new airport projects, the Construction Business has confirmed and consolidated its growth of 30% in 2022, with sustained activities in all its business units: maintenance, construction and airport projects.

On the maintenance projects, in addition to regular asphalt pavement works, we have resumed the micro-surfacing works for the maintenance of the expressway and, once again, we took a lead on the 1st Fibroseal contracts launched by the Expressway Authority of Thailand (EXAT). Fibroseal is a new technic of micro-surfacing upgraded with glass fibers. This was also the first Fibroseal project in Thailand. The Tipco Asphalt Group prides itself on being the sole company in Thailand with the expertise and know-how for Fibroseal work.



On the construction projects, the activities slightly slowed down due to government budget constraints in 2022. However, we still have 5 ongoing construction projects this year with the Department of Highways (DOH) in the North and the Northeast regions of Thailand. The construction projects represent around 110 km of the new section or widening of highways.

One major change in 2022 was that airport projects constituted the main activity of our Construction

Business. We have been working on the maintenance and the construction of runways and taxiways of several airports for the Airport Authority of Thailand (AOT) and Department of Airports (DOA) in Bangkok and other provinces; including major airport projects like the rehabilitation of the runway of Don Muang airport and the construction of the 3rd runway of the Suvarnabhumi airport which represented 40% of the overall activities of our Construction Business. After the execution of earthworks and ground improvement works of this 3rd runway project, TNJV executed the drainage works, the subbase and asphalt pavement works with 270,000 tons of hot mix asphalt produced and paved in 2022 which was considered the most usage of asphalt for any airport projects in Thailand for last 10 years. At the end of 2022, the 3rd runway project showed progress of almost 50% as planned. Beyond the execution of works and technical challenges, this project presented an opportunity for the Group to showcase its strong expertise in the Construction Business in managing the mega project, and we are confident that we are ready for any future challenges.





Consequently, in 2022, the Construction Business reaped the benefits of an ambitious strategy to develop its activity in all road-related works, with 2 big achievements: increasing its volume of works through a large number of contract value and positioning part of its activities on strategic & profitable projects as taking the leadership by developing new asphalt road techniques - its core business - or showing its added value in managing complex projects.

To support the continuous growth of construction activities, the Construction Business has made significant investments in key machines and equipment for the 3rd runway project. This investment includes asphalt plants, asphalt pavers, paver feeders, and other rollers, trucks, excavators, and loaders which will provide significant capacity in terms of production and execution to the Construction Business for the coming projects in the future.

To remain one step ahead of its competitors, the Construction Business continuously strives for operational excellence, implementing new technologies and digital tools to improve project execution and performance such as introducing a new paver with a guidance system and a digital application for monitoring production.

Finally, to ensure sustainable growth, the Construction Business prioritizes safety in all its operations, with an ambitious but important goal of ZERO accidents in all its construction sites. Thanks to the strong commitment of top management and employees at all levels, we have achieved great safety performance with 5.3 million manhours with no lost time incident (LTI) on 3rd runway project.

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



INTERNATIONAL MARKETS

Regional asphalt demand improved in 2022 as most countries resumed road constructions. In response to this, major oil refiners increased asphalt production in anticipation of rising asphalt prices especially in H1/2022. Due to the on-going limited supply from the KBC refinery, the Group's strategy remains "Selective Market Strategy" while focusing on markets with high margins.

Indonesia

As Covid-19 cases continued to decline and transport restrictions were gradually eased off, infrastructure development, especially road construction, has increased in Indonesia compare to 2020/2021 when the pandemic first hit.

Indonesia's asphalt imports showed an increase of nearly 20% compared to the previous year and were still dominated by the Java and Sumatra areas with their multi-year projects.

Along with increased government spending on these infrastructure projects, PT Asphalt Bangun Sarana (ABS) has been focused on pricing strategy through better inventory management to ensure supply continuity, optimized operational costs and financial risk management. This improves profitability and working capital, while enabling ABS to maintain its position among the top 5 importers in Indonesia.

2023 will be a year with opportunities for ABS with the commencement of road construction for the Ibu Kota Nusantara (IKN) project, the new Indonesian capital city in East Kalimantan which is adjacent to ABS' operational area.

Vietnam

The Vietnam asphalt import market increased by 18% in 2022 due to the intensive construction of

key expressways projects. Asphalt Distribution Company Limited (ADCo), achieved its best financial performance since TIPCO's acquisition, and maintained a strong position in the country with a 27% volume growth year on year. Moreover, ADCo has continued to leverage on the Group's R&D capability, by actively promoting high-performance and low carbon solutions to the Transport Authorities and Agencies of Vietnam.

Demand for asphalt is expected to grow in 2023 thanks to the construction of new expressways and existing roads maintenance. The Company will reinforce its technical leadership position by providing more advanced technical solutions to project owners, design agencies and contractors, for all infrastructure segments.





China

Due to China's tight zero Covid policy, the government's infrastructure plan moved slower than expected. The asphalt market demand in China decreased by 16% in 2022, with bulk imports alone dropping by 12%.

Despite tight asphalt supply from the KBC refinery throughout the year, which impacted our trading activity, TIPCO's strong brand image in China meant that trading volume increased by 44% compared to the previous year, with an increased profitability.

Retail business activity suffered from measures to contain Covid-19 and projects were delayed. With the latest call to open the country and give-up on the Zero-Covid policy, we foresee a recovery of our retail business, a considerable growth in trading, and continue our strategy to introduce added value products for 2023.

Cambodia

Despite the end of Covid-19 restrictions, the market demand dropped slightly due to budget restrictions and key national road delays. Tipco Asphalt (Cambodia) Co., Ltd. (TAC) however managed to increase its market leadership position with sales volumes equivalent to those recorded in 2021.

2023 will see a growing demand thanks to the start of new national road projects together with Official Development Assistance (ODA) funded projects restarting. In order to strengthen its market leadership position, TAC will promote innovative maintenance solutions to both government authorities and project owners.

Philippines

The local construction industry grew by 12.2% compared to 2021 as the country fully opened in terms of local and international trade. The Philippines' asphalt import volumes declined by 1% due to product and market volatility mainly driven by the Ukraine-Russia conflict at the start of Q2 2022. Despite this, Joint Venture company in Philippines - Phoenix Asphalt Philippines Inc. (PAPI) is pursuing its successful market entry with a 16% growth compare to 2021.

PAPI yielded positive financial results for its third year of operations, closing 2022 on a positive note. PAPI will now be gearing up to have differentiated product offerings in 2023 focusing on emulsion & high-performance grades. This is aligned with the business' vision to be a continued partner in nation building covering infrastructure developments.



THE MARINE GROUP

The Marine Group owns, manages, and operates a fleet of efficient and reliable asphalt carriers with a total tonnage of 42,965 MT DWT and an average age of 15.5 years.

Our full in-house ship-management subsidiary, Tipco Maritime Co., Ltd., is a strategic division for our tanker asset profitability, allowing the Group to have full control of our marine logistics activities, maintenance, and cost efficiency.

The Marine Group has continued to show true resilience throughout the challenges brought on by the Covid-19 pandemic in the years 2020-2022. From March 2020 to the end of 2022, the Marine Group implemented proper measures and detailed planning to ensure all Tipco seafarers were properly taken care of, avoiding prolonged stays onboard. 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.

Times are rapidly changing with the Covid-19 pandemic now becoming endemic, thus opening new frontiers for Industries and Economies around the globe. New energy sources has revealed new growth opportunities, while global regulators have introduced stringent environmental control measures to run sustainable businesses for the years to come.

Taking Off to the Future is a new motto for the Marine Group, setting clear expectations for providing

modern, reliable, efficient marine transportation services for our own business and for new customers that are within the One Colas Group of Companies.

The Marine Group manages the design, construction and service entrance for state of the art, dual fuel, latest energy efficiency bitumen carriers, two for Continental Bitumen in Europe and one for McAsphalt in Canada. These latest technology advanced bitumen carriers will be technically and commercialy managed by the Tipco Maritime Co Ltd.

There is also own newbuilding project started at the end of 2022 that after 3 years will see the most modern, zero environmental footprint bitumen carrier(s) entering the group, thus enhancig further our expansion capabilities.

All this would not be possible without providing training for the future, to the seafarers and to the Marine Group shore staff. Tipco Maritime Co Ltd introduced various training platforms managed under one modern portal called "TRACE" that enables monitoring, tracking and career development of our seafarers, thus enableing them to be ready for the next decade of maritime shipping chellanges.

Finally, the Marine Group greatly contributed to maintaining the Group's asphalt logistics by proposing and implementing innovative logistical solutions in this challenging year. Marine transportation will remain the most efficient transportation solution for the Group for years to come.



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 or feedstocks. Currently, the Group has been purchasing feedstocks from various sources, with the business 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 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 11% of total raw materials used. The remaining 89% is sourced through local suppliers. The Group still purchases Ultra-low Ammonia locally, which allows us to produce environmentally-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 refineries
- Diesel and fuel oil purchased from oil refineries and traders
- Lubricant products such as engine oil, transmission fluid, hydraulic oil purchased from refineries in South Korea, Thailand and traders.

The Group continuously strives for good corporate governance practices to maintain its sustainable development. In order to create value for our goods and services across our manufacturers, service providers and distributors all the way to the users, the Group has established its sustainable procurement policy as a way to promote social responsibility in the group's business value-chain. Appropriate policies and procedures have been put in 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 an 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. For instance, the Group has established environmentally friendly procurement practices for products and services. The value of green procurement is monitored with the objective to improve the operational process continuously.

In addition to green procurement, the Group shall promote the awareness of sustainable procurement concepts in developing our relationships with suppliers to further improve the value-chain of the Group's business. In 2022, the Phitsanulok plant in Thailand received Green Industry certificates level 5, Green Network: An organization shall incorporate entities of their supply chains into the green industry umbrella.

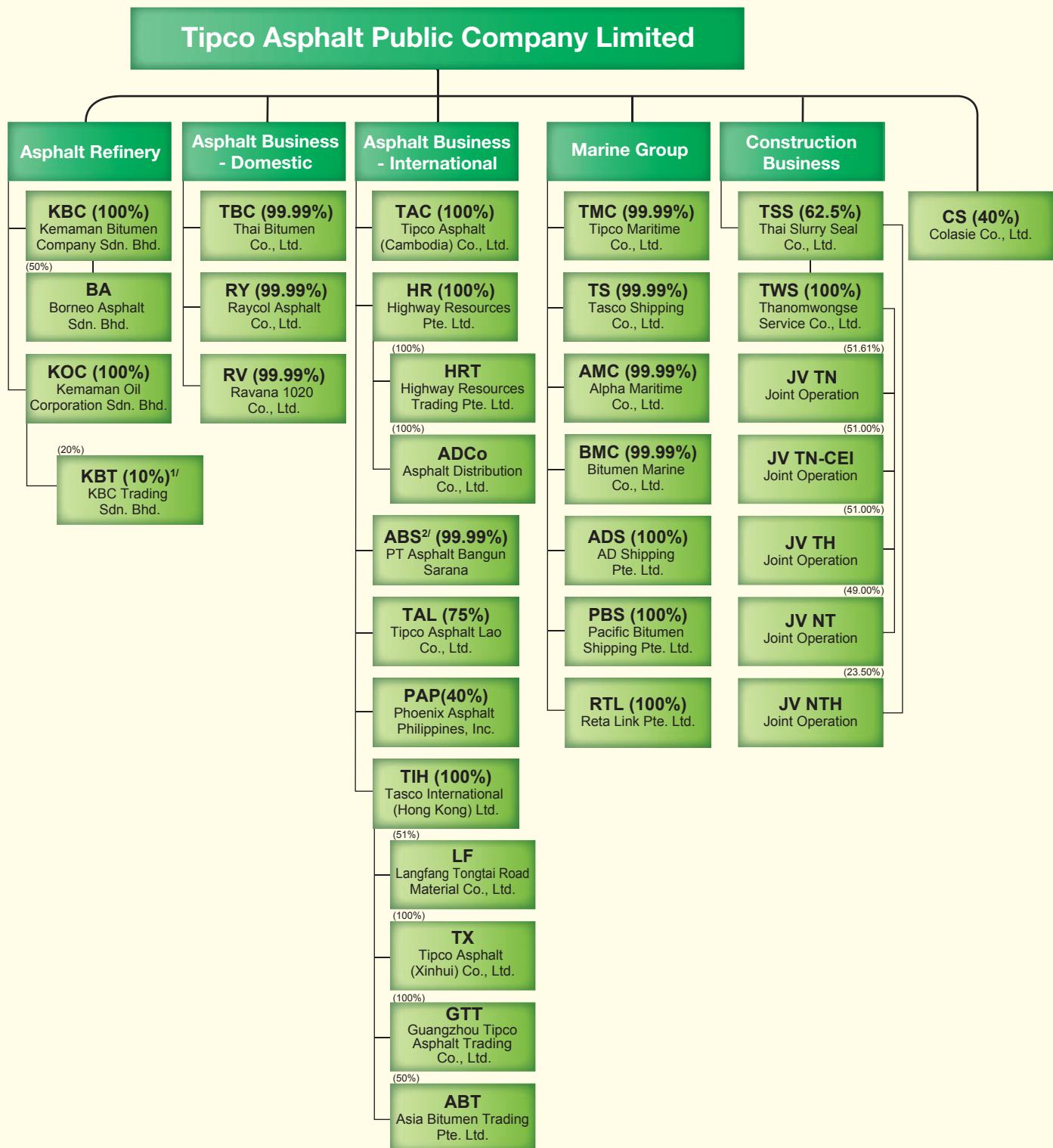
1.2.2.4 Under-construction projects

There is no undelivered work of the Company and its subsidiaries with a value exceeding 10% of total revenue in the consolidated financial statements for the period ending December 31st 2022. In any event, the details of undelivered work of the Company and its subsidiaries with a value exceeding Baht 500 million is shown as follows:

Project name	Nature of Work	Project value (Million Baht)	Commencement Date	Completion Date	% remaining	Remaining Value
3 rd Runway Suvarnabhumi Airport	Runway Construction	4,685	28 September 2020	19 September 2023	50%	2,333
SAT2 Suvarnabhumi Airport	Ground Improvement	1,410	1 September 2022	16 February 2025	100%	1,410
Chiangrai# 1020	Road Construction	714	17 September 2021	6 November 2023	76%	542

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)

Production Facilities, Oil And Asphalt Terminals



^{1/} Temporary floating storage at Batu Licin

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, 8th 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

Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
FOREIGN SUBSIDIARIES							
Malaysia	KEMAMAN OIL CORPORATION SDN. BHD.	Manufacturer, storer, tank rental, distributor of petroleum and oil products and as investment holding company 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.
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	2532-3108	97.966 million	HKD 97.966 million	100% held by Tipco Asphalt
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 Futures Exchange	Room 1003, 1004, No. 334 Huansi 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

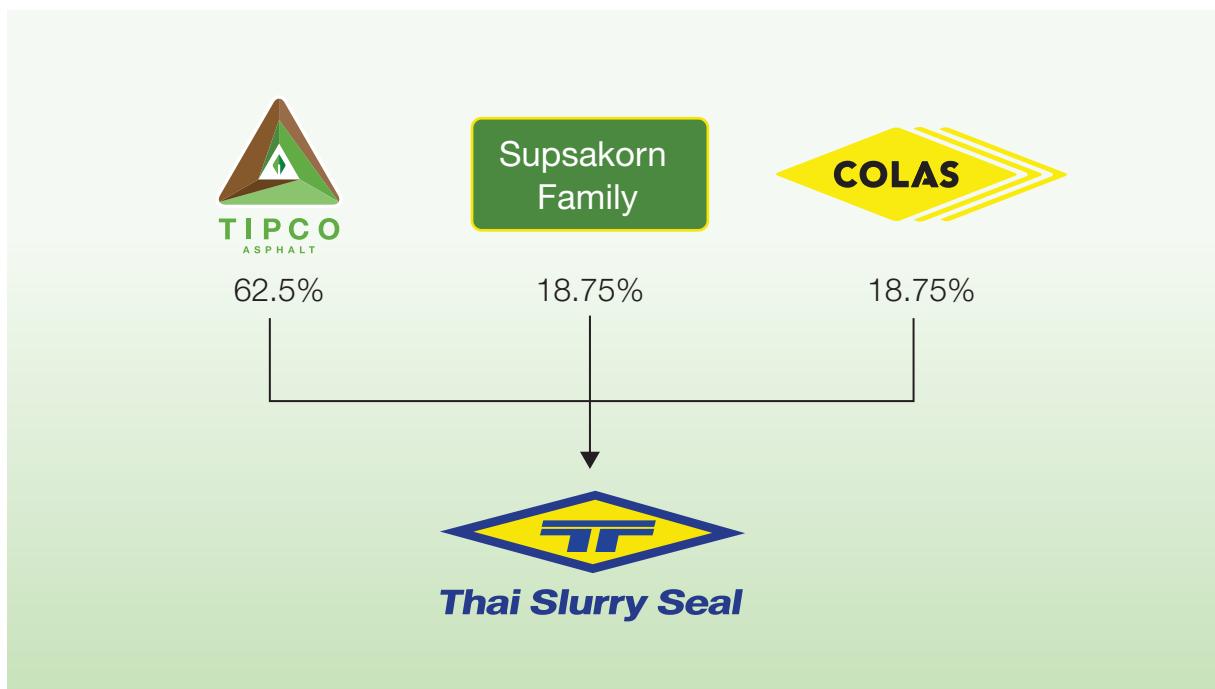
Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
SUBSIDIARIES COMPANIES							
Lao	TIPCO ASPHALT LAO CO., LTD.	Producer and distributor of asphalt product	Xoknoy Village, Saysettha District, VIENTIANE, LAO PDR	+856 21 262872-3	2.5 million	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	+622 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	+622 1837 09516	-	IDR 10,476.6 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.
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	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	0.3 million	Ringgit Malaysia 0.3 million	20% held by Kemaman Oil Corporation Sdn. Bhd. 10% held by Tipco Asphalt Public Company Limited

Country	Company Name	Principal Business / Products	Address	Tel.	Ordinary Shares	Registered Capital	Percentage Holding
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 Int'l (Hong Kong) Ltd.,
Malaysia	BORNEO ASPHALT SDN. BHD.	Receiving, Storing, Trading and Distributing of asphalt and asphalt-related products	Room 201, 2 nd Floor, Wisma Bukit Mata Kuching, Jalan Tunku Abdul Rahman, 93100 Kuching, Sarawak.	082 496917	6 million	Ringgit Malaysia 6 million	50 % by Kemaman Bitumen Company Sdn. Bhd.
Phillipines	PHOENIX ASPHALT PHILIPPINES, INC.	Importer and manufacturer, sell and distribute of asphalt and related products	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	4 Rue Jean Mermoz 78114 Magny -Les-Hameaux	-	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% of total issued and paid-up shares, to 62.5% 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 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 top 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 2022 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	Supsakorn Family	106,510,000	6.748 %
4	Thai NVDR	67,665,188	4.287 %
5	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	23,554,028	1.492 %
6	Krungsri Dividend Stock Fund	15,284,200	0.968 %
7	STATE STREET TRUST COMPANY CANADA	13,861,600	0.878 %
8	Mr. Pichit Lerdtamrub	10,600,000	0.672 %
9	Mr. Pairat Varunvichit	5,200,000	0.329 %
10	Mr. Chaiwat Sivasirikarun	4,500,000	0.285 %
11	Others	470,573,854	29.814 %
Total		1,578,361,570	100 %

Remarks:

- Shareholders of Thai NVDR Co., Ltd., who hold non-voting depository receipts (NVDR) in No. 4, are ineligible for voting at shareholders' meetings except when exercising their voting rights on delisting the shares from SET
- Number 5 is a nominee account. Reference to Thailand Securities Depository Co., Ltd. (TSD), ultimate shareholder's names is unknown.

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, and Mr. Frederic Roussel. The Directors in Group B are Ms. Laksana Supsakorn, Mr. Somchit Sertthin, and Mr. Chaiwat Srivalwat.

1.4 Registered capital and paid-up capital

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 dividends of at least 60% of the consolidated financial statements' 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	2018	2019	2020	2021	2022
Earning per Share	0.36	1.98	2.28	1.41	1.50
Dividend per share	0.30	1.50	1.60	1.05	1.25 ^{1/}
Payout ratio	84%	76%	70%	75%	83%

^{1/} Include the proposed final dividend of Baht 1.00 per shares, which is subjected to approval at 2023 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 an annual dividend of at least 60% of the financial year's net profit after tax deductions and reserves to their respective shareholders.
2. Such dividend payments will be made after taking into consideration the investment plan of each subsidiary for the following financial year.
3. The Group CFO will have the final discretion.

2 Risk Management

2.1 Risk Management Policy and Plans

The Group's business models and operations are designed to be resilient against risk factors, business disruptions and market volatility. As a result, identifying and managing key potential risks are at the core of our business practices. The Group has adopted its Enterprise Risk Management (ERM) practice since 2012. The ERM practice mainly focuses on identifying and assessing uncertainties associated with strategic, operational and business objectives. It 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. In 2022, ERM exercises were extended to include our construction business and subsidiary in Cambodia.

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 practices, 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 all kinds of challenges 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. Information of the Group's Risk Management Policy can be found in 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 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 description, 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 shared in the Quarterly Risk Report which is submitted to the RMC, the EC and ultimately to the Board of Directors for acknowledgement and approval.

To maintain our dynamic risk management practice, the Group conducts comprehensive risk reviews every two years to fully reflect potential risks in 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, and the second in 2022.

Starting from 2022, ERM exercise work implementation has been extended to the Group's subsidiary in

Cambodia and construction business, which are expected to be completed by mid-2023. 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 (via virtual assessment), to ensure our operations stay resilient with an ERM adequately reflecting the current market situation, particularly in light of the ongoing Covid-19 pandemic.

TIPCO Asphalt Public Company Limited was audited by an independent certifying body (MASCI) on the application of the ISO31000:2018 guideline regarding the integration of enterprise risk management practices in the organization. The Company was received recognition accordingly with a Risk Management maturity score of 81%.



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 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 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. 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.

EMERGING RISKS

The Group is also cognizant of potential emerging risks that might impact our businesses in the coming 3-5 years. One such corporate risk concerns cyberattacks and IT security. Due to rapid advancements in technology and the expanding role of 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 these 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).

Among the emerging risks related to the IT security of the Group are personal data privacy and personal data breaches/misuse. Since 2021, the IT and RMO departments have 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 Personal Data Protection Act (PDPA) with regular monitoring starting in 2022. Information of the Corporate Policy on Data Protection is available in 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 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, credit risks 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 2021 due to weakened demand and lower disbursement of fiscal budget for infrastructure projects. The Group tries to maintain its collection and get more securities from customers than in preceding years.

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 38 billion or USD 1.10 billion. This amount is more than enough to support higher financing requirements for crude purchases in the event of high crude prices. Consequently, 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 forward contracts booked for known foreign currency exposures 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 as a result of political tension between Russia and Ukraine, ranging between USD 76-128 per barrel during the year. The Group's hedging policy has continued to be effective and contributed to supporting 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 Group carefully formulates its hedging strategy for each crude cargo.

REFINERY OPERATING ENVIRONMENT RISK

Safety is at the heart of the KBC Refinery's operations. 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, with the last crude tank TK-501C completely installed in the firefighting facility in September 2022. All of the study's recommendations were implemented. Moreover, the Insurance broker's survey conducted by Aeon earlier this year confirmed and approved the safety of our operation philosophy, and suggested points of further improvement as part of its renewal of the Refinery's insurance.

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 99.83% in December 2022, a significant achievement for a refinery plant in its 15th year of continuous operations. The refinery team continues to focus on asset integrity to ensure no units fail prematurely.

As of May 1st 2022, Malaysia began relaxing several of its pandemic-related restrictions, allowing the country to return to a situation of greater economic normalcy. The KBC Refinery followed the government's new Standard Operating Procedures (SOPs) by ensuring all staff were fully vaccinated. Based on last year's performance, we have proven that we can adequately respond to pandemic-related situations with minimal impact on the Group's business.

With regards to personnel safety, the KBC continues to adopt the strong safety culture bolstered by its 'Goal Zero' initiative. The KBC team takes pride in having a zero-fatality track record since its inception, and boasts a 3,454,486 man-hours without Lost Time Injury (LTI) as of December 2022. 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.

In keeping with best practices, the refinery continues to prioritize emergency preparedness and response as key tools to prevent serious incidents and ensure 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 following 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 AC supply and demand balances potentially resulting in supply shortages remain a key 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. Supply risk is also mitigated by the ability to

produce AC at the Group's own refinery in Malaysia. Expanding collaborative networks with various market players has also helped secure alternative AC sources 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 2022 was still the global Covid-19 pandemic. The Marine Group managed to navigate its fleets and seafarers safely in 2022 with only a few reported infections onboard but with zero delays in product shipment.

There is still a risk of shortage of well-trained seagoing personnel. The Marine Group continues to make efforts in training and developing its seafarers to properly mitigate this challenge.

RISKS RELATED TO DOMESTIC MARKET

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

In the fiscal year 2022, the Thai government's key focuses remained on infrastructure developments including road construction, repair and maintenance.

The spread of Covid-19 continued to affect the Group's asphalt business in the Thailand market in 2022. However, these impacts are no longer as severe as when the Pandemic first broke out, as our customers, mostly road contractors, have learnt to adjust their operations to ensure non-interrupted construction operations accordingly.

RISKS RELATED TO INTERNATIONAL BUSINESS

Sourcing alternative crudes/feedstocks remained a challenging factor to the Group in 2022, which greatly impacted KBC production, resulting in a limited supply out of the Kemaman. The Group's strategy to fulfil Retails Business's demand is still a top priority, therefore balanced volume is kept at marginal levels for International Trading.

Total supply in the region has improved as most of the major refineries increased production output to capitalize on rising bitumen prices in H1 of this year, yet the market remained volatile due to crude price fluctuation and demand uncertainty in China fueled by the country's the zero Covid policy. Additionally, vessel availability tightened towards the end of the year, causing difficulties in bitumen lifting for most regional traders . As a result, refiners have to adjust production from time to time to prevent oversupply, consequently impacting regional bitumen pricing.

The vessel shortage situation is expected to continue until at least H1 2023 when new or substitute vessels become available. Regional supply remains stable, while the turning point is on overall demand,from China especially. Hence, price is predicted to fluctuate next year according to these uncertain factors.

RISKS RELATED TO INTERNATIONAL RETAIL BUSINESS

The safety of all employees and contractors/third parties remains the Group's top priority in managing the transition of the Covid19 pandemic towards the endemic stages. The stages of recovery were different for countries where the group operated. All subsidiaries have an active safety policy and adopt good practices shared among all entities. The top risks related to International Retail business were the disruption of our asphalt supply chain, the adaptation of the WFH/WIO working arrangements, and the uncertainty of the government initiatives to continue spending on infrastructure projects in the post-pandemic landscape.

On the asphalt supply chain, the group was forced to overcome the shortage by securing more third-party sources, while implementing a prioritization system to ensure our key retail customers' requirements were met. The adaptation of the WFH/WIO arrangements through out the pandemic period was implemented by our retail subsidiaries in 2022 which prevented the Group from having major operational breakdowns. These arrangements ensured the safety of our staff, allowed us to maintain work efficiency, and ensured continued customer satisfaction.

With the end of the pandemic stage, inflation concerns rose due to geopolitical uncertainties and energy/oil supply disruptions. The main impacts to our businesses were mostly related to lower government budget spending, resulting in lower market demand which impacted margins in some of our retail subsidiaries including China, Cambodia, and Indonesia.

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 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.

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 to help them understand the role they play in helping 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 avoid compromise to our accounts, the IT department has developed

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 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, the climate crisis, 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 impact of our business activities. These include reducing energy loss in our systems, the use of alternative fuel, and improvements in machine use and other processes to reduce energy consumption, greenhouse gas emissions, potential accidents, and product spillage. We also adopted a waste management system following the 3Rs concept (Reduce, Reuse and Recycle) to reduce waste and reuse recycled water.

Social risks

Key social risks were identified regarding safety to do with public road transportation and employee health. 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.

In keeping with growing global awareness of the importance of data privacy, as exemplified by Thailand's Personal Data Protection Act (PDPA), effective from June 2022, the Group has implemented several controls to mitigate the risks of data privacy breaches. 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 has 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 2022, we revised our policy, guideline manual, Code of Ethics, and corruption risk register, to further improve our anti-corruption practices 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 in 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 two 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 2022). Such shareholders may disapprove any agenda in the annual general meeting requiring affirmative votes of no less than three quarters of the total votes 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

The Group operates with an aim to become a sustainable organization. Our sustainable development policies and strategies are formulated in line with the Group's corporate strategy, which serves as a blueprint for our business operations across economic, social and environmental factors linked to corporate governance. We aspire to be a leading corporation that prioritizes safety standards, the well-being of our employees, responses to and expectations of related stakeholders and communities, and the preservation of natural resources and the environment to coexist peacefully and respectfully with the various environments of our business operations.

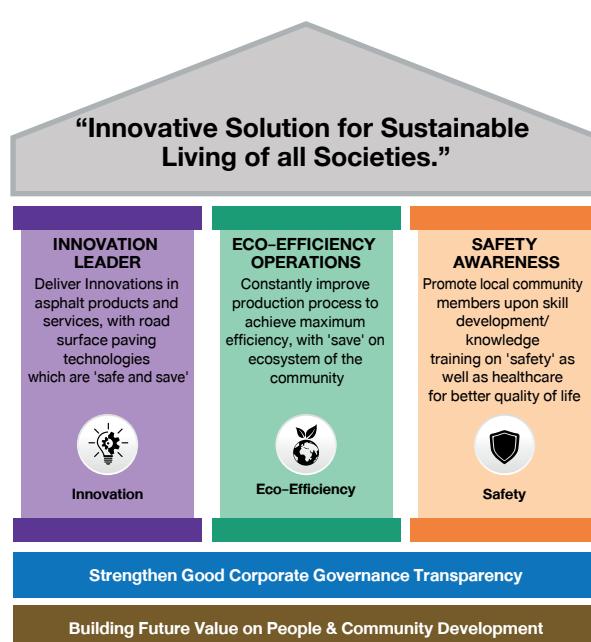
Since 2018, the Group has established a sustainability roadmap which includes group-wide sustainability policies, strategies, and goals. The roadmap was approved by the Board of Directors, and serves as the key driver for us to achieve our sustainable development vision by transforming concepts into

practices while embedding In-Process Sustainability Development across our operations. Details are as follows:

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 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 assessments and the implementation of control measures. This also included risk-identification to combat corruption and human rights violations. In 2022, the risk registers were re-assessed along with reviews of internal risk control measures to ensure the validity of the identified risks and check the effectiveness and adequacy of corresponding risk control measures.
- 1.3) Review Materiality Analysis and Assessment to accommodate business plan, decision making and process approach. The review is done through regular Sustainability Materiality surveys conducted by the Sustainable Development Department on our related stakeholder groups, both internally and externally. The survey results are used for our materiality analysis and sustainable development work directions. Our latest 2021-2022 Sustainability Materiality survey was conducted in 2021, the results of which were submitted to the Sustainable Development & Corporate Governance Committee for acknowledgement and approval.
- 1.4) Promote corporate sustainable development in accordance with the United Nations' Sustainability Development Goals (SDGs) and the Global Reporting

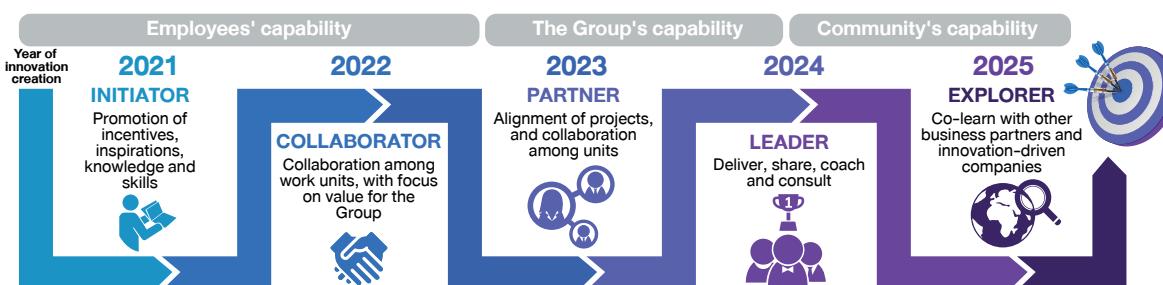
Initiative (GRI)'s sustainability report framework which encompass all operations across economic, social, and environmental aspects including good corporate governance.

- 1.5) Respect relevant stakeholders' interests, by setting goals to ensure their satisfaction, while minimizing stakeholder complaints.

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

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

The Group formulated its Innovation Roadmap 2025 to serve as a guideline for systematic innovative thinking. The roadmap has been implemented since 2021, with a focus on employee skill coaching, inspiration, and incentives for employees to initiate and create innovation. In 2022, the roadmap aimed at innovation initiatives from mutual collaboration across units, giving employees the chance to witness and reap 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, 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.



Chief among 2022's highlights was the Group's focus on cultivating innovative culture by creating work environments that encourage employees to show their creative potential. Alongside this, efforts were made to promote a sound understanding of conceptual design and innovation processes through various activities and projects such as Innovation Bootcamp, Innovative Solutions Award, Innovation Accelerator Program, Small Wins initiatives, and Total Productive Maintenance Awards.

- The Internal Innovation project which ran from 2019 to 2022 produced a total of 306 innovations which resulted in 47.9 million baht in cost savings for 114 projects, and 14,698 hours worktime reduction.
- In 2022, we conducted an Innovation Bootcamp with a total of 105 participants, 69 of whom were from Thailand, and 36 from our international subsidiaries. There were 16 innovative project ideas from all participants, with 1 completed project, 11 on-going projects, and 4 newly-formulated incipient project.
- In addition, we arranged BU & individual initiatives (Small Wins), which are collaborations across units internal and external to the organization. There are a total of 10 projects which resulted in 1.5 million baht in cost savings and 230 hours in worktime reduction per annum.
- The Innovation Accelerator Program is 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. All projects received funding to develop prototypes to bring to customers, and this will continue in 2023.

2.1) Promote and communicate innovation with a 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 added 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 improve quality of life. The aim is to become a data-driven innovator that maximizes the use of large databases to improve the business, economic, social, and environmental 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 9, 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-use, 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 and stakeholder (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 on or supervise our operations across our various 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, and promoting the 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

of 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 including respecting international norms of behavior. The Group also instills and integrates awareness of ethical behavior to employees at 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 across 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 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 employees across all subsidiaries and to all related stakeholders, as well as being publicly 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 re-certified in 2020. In 2022, the Company re-assessed its corruption risk register and revised its Anti-corruption Guideline Manual in preparation for the next recertification round of CAC membership, which will be expired by 30th June 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 regulation on Personal Data Protection Act (PDPA) which took 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 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 no-discrimination while respecting human rights of all related stakeholders across business value chain. We treat all employees and workers with respect, from providing fair job opportunities, assigning tasks based on each staff's individual capability with appropriate compensation, and prohibition of underaged and illegal employment. This practice applies

to everyone, including our employees and those of affiliated partners' workers and/or stakeholders. The Group ensures the safety of employees, workers, company assets without encroaching on the rights and safety of other parties. In addition, we protect personal rights and information while treating our employees, workers and affiliations equally.

Our primary goal is to achieve a common understanding of our stakeholders about our position on human rights. We ensure fully open communications for feedbacks through all whistleblowing channels from internal and external stakeholders.

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 to balanced benefits across economic, social, environmental factors and good corporate governance.

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

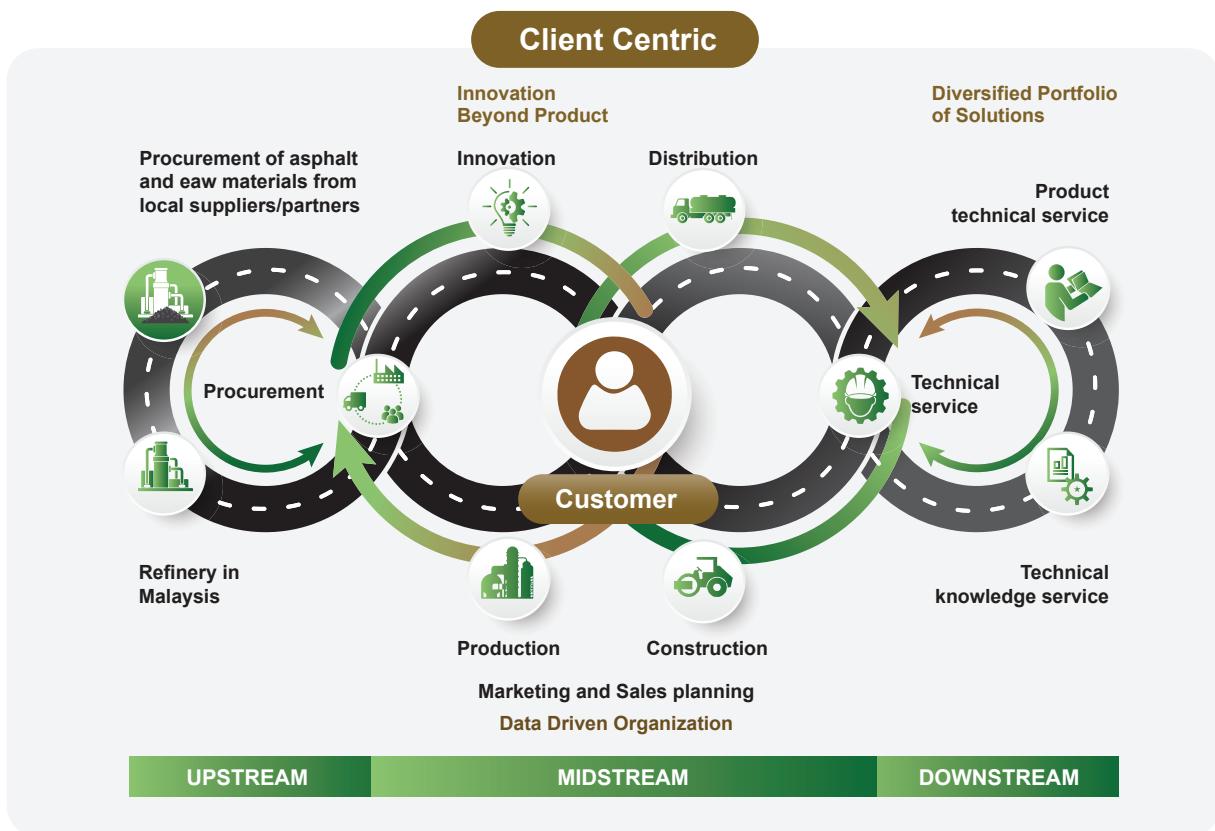
The Group's value chain is designed to encompass all business processes in line with its Vision 2025 strategic plan. The value chain begins with customers' preferences and expectations as the core of the business driving force. This 'Customer centric' approach encompasses business operations across the 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, 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 through our punctual product delivery with real-time monitoring. Our technical services team possesses great expertise

on asphalt, and is on standby 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 - Finance team - Management team 	<ul style="list-style-type: none"> - Crude Supplier - Crude Freight Provider - Authority - NGO - Competitor 	<ul style="list-style-type: none"> - Secured Supply Source
	Raw materials for local production			<ul style="list-style-type: none"> - Local Procurement - Green Procurement
Refine	Crude refinery at Southeast Asia's largest asphalt refinery, (Crude refinery capacity Up to 30,000 barrels per day) 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
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 	<ul style="list-style-type: none"> - Best quality products for road user safety. - Reliability and trust with stakeholders

Value Chain	Source	Internal Stakeholders	External Stakeholders	Value to Our Stakeholders
Distribute	<p>Storage, 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	Stakeholders' Expectations	Responses
Internal Stakeholders		
Company Directors	<ol style="list-style-type: none"> Conduct business in accordance with regulations and ethics Conduct business with transparency. Conduct business to achieve sustainable success 	<ol style="list-style-type: none"> Diligently enforcing good corporate governance in line with relevant policies Embed sustainability in corporate & business plan
Employees and Families	<ol style="list-style-type: none"> Good quality of life and well-being Work in a healthy and safe environment Access to job stability and career advancement Fair compensation and respect human rights Access to training sessions for skill development 	<ol style="list-style-type: none"> Happy and Safe Workplace with work-life balance Continuously develop skills and potential Promotion, Salary, and Career Advancement Open communication across corporate activities Foster Innovation Culture that promotes productivity and creativity
External Stakeholders		
Customers	<ol style="list-style-type: none"> High quality products and services at competitive prices Ensure privacy and security of personal data, fair treatment, and respect customer rights Timely delivery of products and services 	<ol style="list-style-type: none"> Reliable and timely delivery of high-quality products Accommodate customer needs across all product aspects Provide effective communication channels for feedbacks and complaints Customer relations activities, seminars and roadshows Good corporate governance and transparency that can be audited Implement Anti-Corruption Policy and implement action plans Managing product and service following Quality Management System (ISO9001) Byproduct certification via testing and calibration laboratories standard (ISO17025) Adhere to ethical conduct regarding clients' personal data protection

Stakeholder Engagement and Sustainable Co-Value Creation		
Stakeholders	Stakeholders' Expectations	Responses
External Stakeholders		
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 on 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	Stakeholders' Expectations	Responses
External Stakeholders		
Supplier/Partner	<ol style="list-style-type: none"> 1. Receive accurate data in 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. Support 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 an open mind
Road user	Ensure road safety	<ol style="list-style-type: none"> 1. Ensure road safety at all times 2. Conduct high quality road paving to ensure long 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 sound ethics to ensure good corporate image as 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 to fair business ethics and transparent management

3.3 Sustainability Management on Environmental Dimension

3.3.1 Environmental Policy and Guideline

Tipco Asphalt has implemented its Environmental Management System according to the ISO 14001 standard. Our Head Office and all 5 plants in Thailand have been certified with this standard since 2003. The Group constantly strives to improve our environmental management. In line with our Integrated Management System Policy, the Group aims to protect the environment by preventing/controlling pollutants from our business activities that may impact the environment, which complements our sustainable development strategy focusing on eco-efficiency operations management, climate change mitigation, and our adherence to the circular economy principle. Details on our environmental policy can be accessed in Attachment 5.

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

- Reduce GHG emissions through innovations and focus on TPM improvement to optimize the efficiency of operations linked to production, storage and distribution.
- Reduce industrial waste disposal by minimizing waste generated at the origin.
- Plan to collect and compile greenhouse gas emissions data in Scope 3 related to business. Analyze preliminary data with stakeholders to seek solutions for greenhouse gas emissions reduction.
- Promote multiple-use of materials and avoid single-use materials. Seek and create added-value from waste through a recycling process.
- Reduce groundwater resource usage by providing surface-water internal reservoirs at plants and increasing recycled water usage.

In addition, we have devised long-term action plans as follows:

- Minimize GHG emissions (as measured carbon dioxide per ton produced) through innovations and technology to improve production efficiency across storage and distribution process by reducing emissions and through the removal or sequestration of greenhouse gases from the atmosphere.
- Switch energy sources from fossil fuels to appropriate alternative energy sources such as alternative-fuel energy, wind or solar energy etc.

In early 2022, we reviewed and announced our new Environmental Policy that aligned with the Group's sustainable development strategy on eco-efficiency operations. Key strategies include supporting research and development that create environmentally friendly innovations, reducing greenhouse gas emissions both directly and indirectly, promoting the use of alternative energy sources, promoting a circular economy, and disclosing environmental operations results 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

The Group has implemented its Greenhouse Gas (GHG) Management strategy according to the international GHG Protocol. 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) incurred at both offices and operation plants. Consequently, the Tipco Asphalt Group implemented several initiatives to reduce GHG emissions in 2022. These included improving the efficiency of hot oil pipelines in the production

tank at the Rayong plant to optimize heat transfer and reduce fuel consumption during production and storage process.

In 2022, GHG emissions of all 5 plants including the head office of Tipco Asphalt were as follows: Net direct GHG emissions (Scope 1) were 11,368 ton of carbon dioxide equivalent; net indirect GHG emissions (Scope 2) were 1,629 ton of carbon dioxide equivalent; total net direct and indirect GHG emissions (Scope 1 & 2) were 12,996 ton of carbon dioxide equivalent. Direct and indirect (Scope 1 & 2) GHG emissions intensity were 0.024 ton of carbon dioxide equivalent per ton produced, which decreased by 23.20%, compared to the base year 2020. 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 compile and disclose other indirect GHG emissions (Scope 3) as well.

Furthermore, the Group underwent verification and certification of GHG emissions in 2022 by an independent certifying body (Management System Certification Institute Thailand - MSCI) which is widely accepted according to international standards, encompassing verified data from January to December 2022.

Energy Saving: In 2022, we constantly improved our energy management through innovative ideas related to fuel and energy savings, and GHG emissions reduction. We are focusing on energy loss reduction ‘in process’ such as insulation improvements of production and storage tanks at the Rayong Plant to reduce heat loss. Total energy consumption in 2022 was 162,818 gigajoule. Of this, the consumption of energy intensity per unit of product was 0.31 gigajoule per ton produced, representing a reduction of 22.73%, from 2020, well exceeding our target of energy consumption reduction compared to the base year 2020.

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 surface water reservoirs located inside each plant to reduce water consumption from natural external sources. In addition, we improved our water supply system inside the Rayong plant at the end of 2021 to minimize water leakage from the external municipal supply. Production wastewater is also treated and recycled during the asphalt emulsion production process. In 2022, we were able to treat wastewater from production, and recycled it for asphalt emulsion production amounting 2,782 cubic meters, representing a 6.93% decrease in water consumption compared to 2021 and total water consumption reduction was 20.31% from 2021.

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 make several changes to reduce 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 plants. The Rayong plant has promoted Kaizen activities to encourage employee involvement on waste reduction. As a result, the Rayong plant achieved the 3R Award, Zero Waste to Landfill Award and 3R+ Award (with gold medal) in 2022. The aim is to increase effectiveness of waste management by focusing on waste sorting for reuse or recycle in the plants according to the Department of Industrial Works’ guidelines. In 2022, all 5 plants generated a total of 237.35 tons of industrial waste and zero waste to landfill.

Pollution Control: The Group conducts environmental quality measurements at least once a year at each work location. In 2021, air quality, wastewater discharge, odor and noise measurement results were well in line with statutory requirements, with no

significant product spillage during product distribution outside the plants from 2017 to 2022. In 2022, the Phrapradaeng and Surat Thani plants improved their product leakage control systems.

3.4 The Social dimension of sustainability management

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 beneficial 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 in Attachment 5.

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 in 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 quality of life of its employees, and to 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 global scale. All these concerns are fully reflected across the Group's key activities. From a risk management perspective, the Group's human rights violation risk assessments remain 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.

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.

From the sustainability materiality survey in 2021, we have found that our employees perceive human rights and labor rights to be low risks with marginal negative impacts. The top three impacts to human rights are to do with the safety and occupation health of customers on product usage, and those of contractors product handling, as well as the safety of road users and communities. In 2022, we received zero complaints on human rights violation issues.

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

Significant Human Rights Issues



The Personal Data Protection Act (PDPA): 2019, has been effective from 1st June 2022. In response to personal data protection under our human rights policy, our action for the PDPA is to appoint qualified data controllers responsible for personal data collection, processing, and termination. Training sessions for data controllers are completed, and they have confirmed and submitted the Record of Data

Processing Activities (RoPA) in their scopes to the Data Protection Officer. Employee training sessions are also provided to ensure their understanding of data subjects' rights. All data subjects are notified with a privacy notice. In cases where subjects consent was required, particularly from employees, consent was sought and granted.

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 2022 report showed that the average basic salary of our female employees is slightly higher than their male counterparts. This resulted from there being fewer female employees in the Group and more women holding higher-ranking positions. Other variables also include individual performance grades and work experience.

Average ratio of basic salary and remuneration	2020	2021	2022
Female to male	1.18 : 1.00	1.12 : 1.00	1.22 : 1.00

In communicating with employees, the Human Capital Management Department conducts meetings with employees in local offices to provide information on our compensation structure with comparisons 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 businesses 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 may take, 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.

To ensure 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 an 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 qualifications standards set forth by the Group.

HUMAN RIGHTS OF ROAD USERS AND THE COMMUNITY

The community is one of the key stakeholders 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 increasing income, and ensuring 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 community - 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. This helps reduce accidents caused by poor, worn-out road surfaces, which are among the major causes of personal injuries and road accidents. Our "patching potholes with TIPCO Premix" project is one such initiative.

CHILDREN'S 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 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		
	2020	2021	2022
Employee turnover rate no more than 10%	5.4%	8.6%	10.44%
Employee return to work, after parental leave, at 100%	100%	100%	100%
High potential staff promotion to management level	25.0%	22.2%	40%
Minimum yearly training hours per employee - Target at least 24 hours (for functional and managerial training only)	24.7	18.0	32.02
Succession planning target at 100 %	95.2%	90.0%	95.45
Retention rate of high potential staff - target at 100 %	100%	94.4%	97%
Employee Effectiveness survey result (minimum 75%)	-	-	-
Employee Capability	-	56.0%	83%
Organizational Capability	-	58.0%	69%

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 ISO 45001 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 2021-2022:

Employee Safety

- Adopting and adapting Covid-19 prevention and control measures based on the Risk assessment of Onsite activity, Staff transportation and WFH on a case by case basis.
- 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.
- Promote Kaizen activity for safety such as inspection system for check connecting between truck and trailer.

Contractor and Subcontractor Safety

- Onsite Defensive Driving Course and safety awareness course for outsource drivers promote safe driving across all activities.
- 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 to promote Safe driving practices.
- Safety consultant onsite to improve safety of customer operation area.

Community Safety

- Basic life support training (CPR and AED Training) for community near plant area such as Village Health Volunteers, Local Administrative Organization, community and other company employees.

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:

- Zero Fatal accident case from Logistics outsource
- Zero 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 drivers.
- Lost Time Injury Severity Rate was recorded at 0 day per one million working hours for all employees including truck drivers.

3.4.2.4 Corporate Social and Community Responsibility Operation

As the ongoing Covid-19 pandemic becomes less 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.

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 situations. 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 Local Administrative Organization and community, and basic life-saving knowledge training (CPR & AED) was provided for staff and relevant communities. 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 51 participating students.

- Premix Use Demonstration Training for external stakeholders - the project has already been repeated 8 times.
- 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 the 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 14.54 million baht in cost savings and reduce worktime 12,564 minute from 78 FI Theme of supervisor project and 885 Kaizen sheet from operator as reflected by our 2022 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 and promoting environmental preservation through the absorption of carbon dioxide. A total of 33,707 trees in the forest were conserved near the community, covering approximately 127 square meters.
- The Bueng 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 3,403 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 2022, a total of 107 trees were relocated.
- 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 91 drivers have completed the training course since 2022 (representing 100% of overall drivers) and around 81 outsourced truck drivers participated in the Safety Training Course of Outsource truck drivers (representing 79% 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 8 projects, covering a road distance of 7.15 kilometer.



- 4 CPR and AED training sessions, with 343 participants, and a total of 2,237 participants since 2018.

- Road safety for 494 children and adolescents from 4 schools.
- Walking and jumping practice tool kit at the Regional Special Education Center 7 Phitsanulok for children with special needs to stimulate and develop their skills.
- Corporate social responsibility initiatives: Collaborate with 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. In 2022, CSR center launched a career-creating project by helping 25 underprivileged youths reach the necessary career criteria to improve the well-being of their families.



Public Charity and Arts and Culture Support

- Buddhism support, including
 - Annual visit to Kathin at Opas Temple, Rayong. The Group has donated (through contributions from employees and the general public) a total sum of 100,000 baht.

Community-based Volunteering

In 2022, community volunteer activities increased after the Pandemic's effects and subsequent restrictions were eased. Out of precaution, The Group adjusted its plans in accordance with corporate and government policies by limiting the number of participating volunteers for each area. Volunteer hours increased

from 7.8 hour/person/year to 11.4 hour/person/year. The Group is confident that employees will stay motivated to participate in community-based volunteer activities in the future, and will remain adaptable to changing plans depending on circumstance.

Volunteer Activity	2019	2020	2021	2022
Employees' volunteer hours	15,358	13,077	2,716	5,464
Participation rate (hours/person/year)	22.9	24.5	7.8	11.4
Total participants (person)	670	528	348	481
Employee volunteer proportion	93.5%	81.4%	63.2%	81.5%

Volunteer Activity Support Budget

In the first half of 2022, the Group's CSR activities were affected by the pandemic, with the Group revising some of its activities to fit the evolving situation as a result. After the pandemic was eased, the Group's key

CSR activities resumed, as did employee volunteer activities. This resulted in overall volunteer activity satisfaction increasing to 92.7 %.

Type of support	Amount			
	unit	2020	2021	2022
Cash Distribution	Baht (mil.)	2.9	0.67	1.12
Management Overheads	Baht (mil.)	0.7	0.01	0.17
Others (In-Kind giving: Product or Service Donation, Project / Partnership Support)	Baht (mil.)	5.0	15.0	4.23
Time (Time: Employee cost during paid working hours for volunteering work)	Baht (mil.)	3.0	0.38	0.85
Satisfaction survey for volunteer activities	%	89.0	89.0	92.7

4. Management Discussion and Analysis

The Company's consolidated net profit after tax stood at Baht 2,367 million in 2022 as compared to the net profit after tax of Baht 2,220 million in 2021. Details of the Company's performance can be summarized as follows:

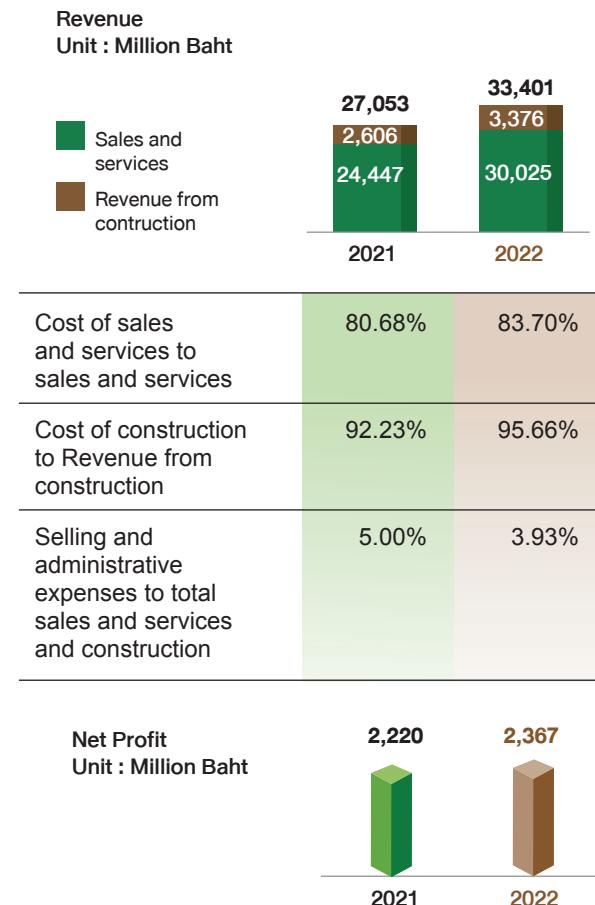
Sales and services stood at Baht 30,025 million, reflecting an increase of 22.82% from last year due to increase in selling price of all asphalt products resulted from the global oil price surge throughout the year.

Cost of sales and services in 2022 stood at Baht 25,130 million or 83.70% (80.68% in 2021) of sales and services before the allowance for diminution in value of inventory and loss from price hedging. The decrease in gross profit was mainly due to the increase in average inventory cost attributable to the increase in cost of feedstock and asphalt purchased from regional refineries. The Company recorded losses of Baht 680 million from price hedging contracts caused by the global oil price increase.

Revenue from construction contracts stood at Baht 3,376 million as compared to Baht 2,606 million in 2021. This was resulted from increase in construction and road maintenance income, in particular the 3rd runway construction project at the Suvarnabhumi International Airport.

Cost of construction stood at Baht 3,229 million or 95.66% (92.23% in 2021) of revenue from construction contracts. The reduction in gross profit was mainly due to drastic increases in materials and energy cost in 2022.

In May 2022, a Company's holding company sold all (51%) of its investment in Zhenjiang Tipco Asphalt Co. Ltd. to the other shareholder of the subsidiary. This resulted in a gain on the disposal of investment in a subsidiary amounting to Baht 35 million. This



was included in "other income" in the consolidated statements of comprehensive income.

Selling and administrative expenses stood at Baht 160 million and Baht 1,154 million, representing 0.48% and 3.45% of total sales and services and construction, respectively. Comparatively, these expenses in 2021 stood at Baht 170 million and Baht 1,184 million representing 0.63% and 4.38% of total sales and services and construction. The Company is committed to controlling overhead expenses while improving the operating gross profit margin. As part of cost management, we undertook projects relating to principle of Environmental, social, and corporate governance (ESG) that helped the Group's companies to reduce production cost through energy savings

initiatives. For instance, our Rayong plant in Thailand implemented insulation improvements of all the production and storage tanks with the aim to decrease energy loss during production and storage.

The Company recognized an impairment loss for an ocean going asphalt tanker amounting to Baht 196 million and presented it under the impairment loss on property, plant and equipment in the consolidated statement of comprehensive income. This caused a reduction in the carrying value of the asset to its recoverable value.

The Company recorded consolidated allowance for expected credit losses of Baht 120 million in 2022 as compared to Baht 33 million in 2021. This mainly resulted from an increase in loss rate percentage together with an increase in account receivable balance at the end of the year.

The Company's consolidated debt to equity ratio (D/E ratio) was maintained at 0.56, same as 2021's.

The Company's net profit after tax was Baht 2,367 million for 2022 and represented earning per share of Baht 1.50 as compared to Baht 1.41 per share in the previous year.

FINANCIAL ANALYSIS

The Company's cashflow generated from operations stood at Baht 4,525 million as compared to the Baht 4,009 million in 2021 due to improved performance as compared to last year's.

Financial expenses in 2022 were Baht 113 million, compared to Baht 118 million in the previous year. The slightly decrease was mainly due to the decrease in short-term loans used for working capital financing.

The Company's consolidated debt to equity ratio (D/E ratio) at the end of 2022 was 0.56, same as 2021's.

FINANCIAL POSITION

Changes in the consolidated financial position of the Company at the end of 2022 as compared to 2021 can be summarized as follows:

- Increase in cash and cash equivalent was due to the increase in revenue and profit after tax as compared to last year.
- Increase in trade and other receivables was due to increases in selling price together with the increases in revenue from construction contracts in 2022.
- Increase in contract assets was from the unbilled receivables from construction work.
- Decrease in inventory value was due to decrease of feedstock supply as compared to last year.
- The Group has gain on mark to market of commodity forward contracts which resulted from the fluctuation of global oil price during the year.
- Decrease in property, plant, and equipment was mainly from depreciation during the year and impairment of an ocean-going asphalt tanker owned by a subsidiary in Singapore.
- Decrease in intangibles assets was from amortization during the year.
- Increase in trade and other payable was due to increase in purchased price of feedstock and asphalt.
- Increase in income tax payable was due to higher profitability.

KEY FINANCIAL RATIO

Key financial ratio of the Company at the end of 2022 as compared to 2021 can be summarized as follows:-

- Net profit margin decreased to 7.08% from 8.28%

- Return on equity ratio slightly increased to 14.98% from 14.70%
- Debt to equity ratio maintained at 0.56.

CASH FLOW

Cash flow of the Group for the year 2022 can be summarized as follows: -

- Net cash from operating activities was Baht 2,900 million.
- Net cash from investing activities of Baht 248 million was mainly from sales of equipment and vessel.
- Net cash used in financing activities of Baht 1,950 million was mainly for the dividend payment.

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		2020	2021	2022
Liquidity Ratio				
Current ratio	(Times)	1.88	1.81	1.94
Quick ratio	(Times)	0.89	0.73	1.12
Account Receivable Turnover	(Times)	6.09	7.13	5.95
Average Collection Period	(Day)	59.91	51.20	61.33
Inventory Turnover	(Times)	3.21	3.77	5.00
Average Sale Period	(Day)	113.84	96.94	73.06
Account Payable Turnover	(Times)	4.41	7.21	8.29
Average Payment Period	(Day)	82.81	50.63	44.01
Cash Cycle	(Day)	90.94	97.51	90.38
Profitability Ratio				
Gross Profit Margin	(%)	21.24%	18.21%	15.09%
EBIT Margin	(%)	17.06%	11.48%	9.61%
Net Profit Margin	(%)	13.68%	8.28%	7.08%
Return on Equity	(%)	25.43%	14.70%	14.98%
Efficiency Ratio				
Return on Asset	(%)	19.25%	13.54%	12.67%
Total Asset Turnover	(Times)	1.13	1.18	1.32
Financial Policy Ratio				
D/E Ratio	(Times)	0.42	0.56	0.56
Interest Coverage	(Times)	34.28	26.44	28.56

5. General Information and Other Key Information

5.1 General information

Tipco Asphalt Public Company Limited

HEAD OFFICE

Address	Tipco Tower 1, 118/1 Rama 6 Road, Phayathai, Phayathai District, Bangkok 10400, Thailand.
Tel.	+66 2273 6000
Fax.	+66 2271 3363
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

93 Ratchadaphisek Road, Dindaeng, Bangkok 10400,

Tel. +66 2009 9388

Fax. +66 2009 9476

Auditor EY Office Limited, Thailand

Ms. Krongkaew Limkittikul

Certified Public Accountant Registration No. 5874 and/or

Mr. Natthawut Santipet,

Certified Public Accountant Registration No. 5730 and/or
Ms. Siraporn Ouaanunkun

Certified Public Accountant Registration No. 3844

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193/136-137 Rajadapisek Road, Klongtoey, Bangkok 10110

Tel. +66 2264 0777, +66 2661 9190

Fax. +66 2264 0789-90, +66 2661 9192

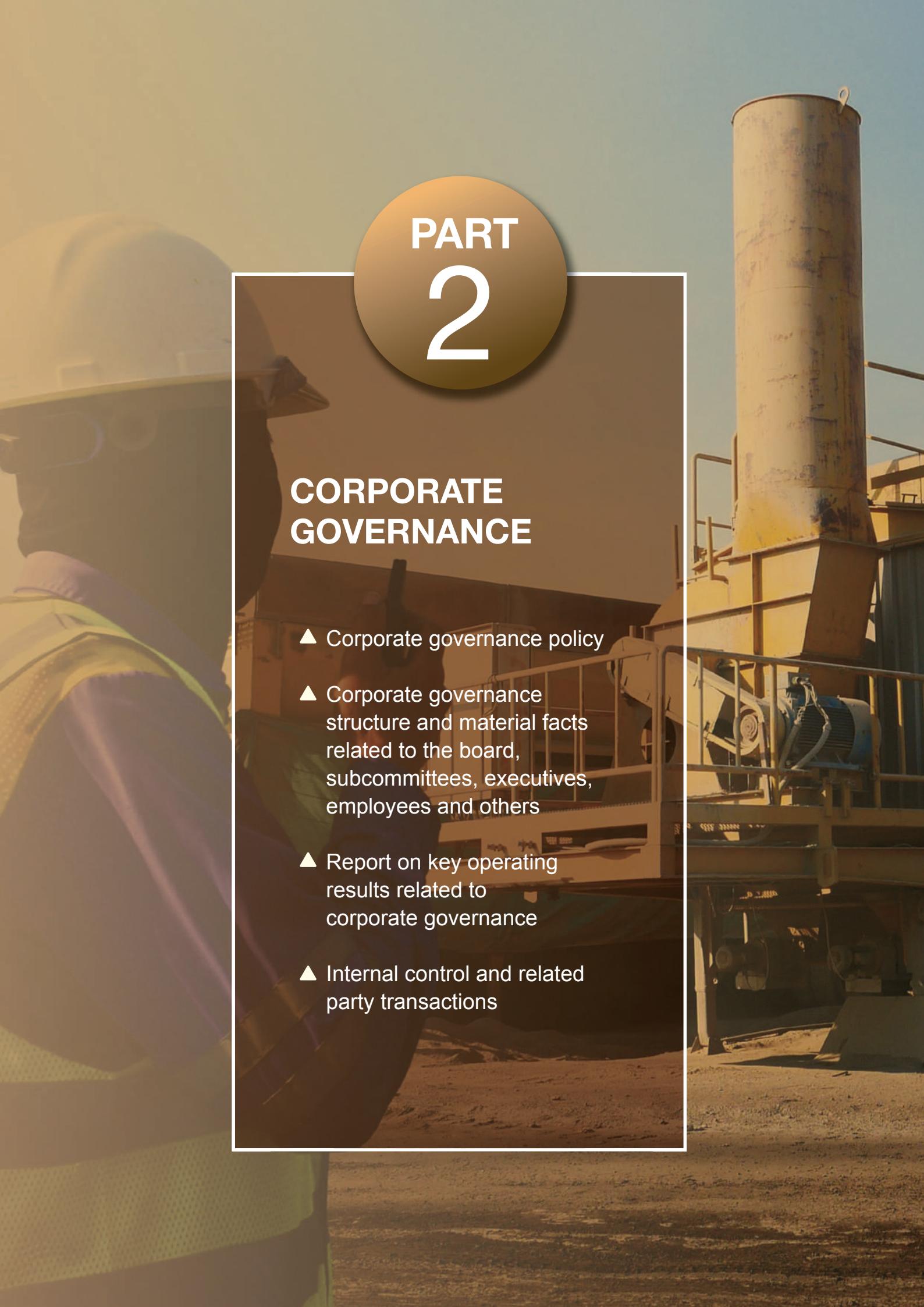
5.2 Other material facts

N/A

5.3 Legal Disputes

As of 31st December 2022, 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

- ▲ Corporate governance policy
- ▲ Corporate governance structure and material facts related to the board, subcommittees, executives, employees and others
- ▲ Report on key operating results related to corporate governance
- ▲ Internal control and related party transactions



**PART
2**

CORPORATE GOVERNANCE

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, in creating shareholder value, and in securing trust from all stakeholders, including shareholders, employees, customers, business partners, competitors, and creditors.

The Board of Directors and management therefore remain committed to 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 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 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 on 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 reside 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 12 members, consisting of:

Independent Directors	6
Non-executive Directors	4
Executive Directors	2

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 possessing all necessary qualifications as prescribed by the Policy on Director Qualifications and Nomination. There should be diversity in the

educational backgrounds and credentials of the various members of the Board, as this 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 2022, the Board of Directors and N&R committee reviewed and confirmed that the members of the Board of Directors collectively 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. Disqualification or any other 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 used for the assessment. 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, of the Directors as a collective body, and of individual employees, in keeping with 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 as stipulated in the Group's Core Values.

NOMINATION OF THE TOP EXECUTIVE

The nomination of candidates for positions in Chief Level (C-Level) is finalized by the Chief Executive Officer. The selected 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.

To ensure the CEO and top executives are able to perform their duties for the utmost benefit of the Company to the best of their abilities, 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:

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 Executive Committee 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 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 3rd October 2022 to 30th December 2022 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, and extraordinary remuneration. 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" 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 2022 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 39.98% of total paid-up capital.

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:

- The right for shareholders 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.
- The right for shareholders to nominate candidates for directorship via the channels provided by the Company as disclosed on the Stock Exchange of Thailand.

- The Company's policy governing the use of internal information which includes 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 2022, 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.

RESPONSABILITIES TO 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.

CONFLICT OF INTEREST

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 brothers/sisters, legal spouses, children and adopted children.

In addition to their required acknowledgement and review of the Company's Code of Ethics, all employees across sales, procurement and purchase, Management and the Board of Directors, must 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 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:

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 all conditions are fully complied with.
- For financial covenants, the Group examines for full compliance after the 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 product quality 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 to codes allowing 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 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, with anti-corruption forming a key part of the orientation program to new employees. In addition, all employees shall renew their acknowledgment of the Code of Ethics annually, 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. Given the current certification’s upcoming expiration in June 2023, the Company re-submitted its complete Self-Evaluation Tools to the Thai Institute of Directors (IOD) for re-approval in December 2022.

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 56-1 One report, Company’s website and SET’s website. The disclosure of information and

quality of financial statements in the 56-1 One report, 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 attendance, 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 1 January 2022	Change as of Shareholding	Shareholding amount as of 31 December 2022	Shareholding proportion
1.	Mr. Chainoi Puankosoom	Chairman, Independent Director	5,000	-	5,000	0.0003
	Spouse/ Minor child		-	-	-	-
2.	Mr. Koh Ban Heng	Vice Chairman, Independent Director Member of Nomination and Remuneration committee	-	-	-	-
	Spouse/ Minor child		-	-	-	-
3.	Mr. Phirasilp Subhapholsiri	Independent Director Chairman of the Audit Committee and Chairman of the Sustainable Development and Corporate Governance Committee	-	-	-	-
	Spouse/ Minor child		-	-	-	-
4.	Mr. Nopporn Thepsithar	Independent Director, Chairman of the Nomination and Remuneration Committee, Member of Audit Committee	-	-	-	-
	Spouse/ Minor child		-	-	-	-
5.	Mr. Niphon Suthimai	Independent Director, Member of Audit Committee Member of Sustainable Development Corporate Governance Committee	-	-	-	-
	Spouse/ Minor child		-	-	-	-
6.	Mr. Jean-Marie Verbrugge	Independent Director ^{1/}	-	-	-	-
	Spouse/ Minor child		-	-	-	-
7.	Mr. Frederic Gardes	Director	-	-	-	-
	Spouse/ Minor child		-	-	-	-
8.	Ms. Laksana Supsakorn	Director	13,860,000	(1,100,000)	12,760,000	0.808
	Spouse/ Minor child		-	-	-	-
9.	Mr. Somchit Sertthin	Director Member of Nomination and Remuneration Committee	31,000,000	-	31,000,000	1.964
	Spouse/ Minor child		10,000,000	1,000,000	11,000,000	0.697
10.	Mr. Jacques Pastor	Director ^{2/}	1,200,000	-	1,200,000	0.076
	Spouse/ Minor child		-	-	-	-

No.	Name	Position	Shareholding amount as of 1 January 2022	Change as of Shareholding	Shareholding amount as of 31 December 2022	Shareholding proportion
11.	Mr. Chaiwat Srivalwat	Executive Director, Member of the Sustainable Development Corporate Governance Committee and Chief Executive Office	3,000,000	-	3,000,000	0.190
	Spouse/ Minor child		-	-	-	-
12.	Mr. Frederic Roussel ^{3/}	Executive Director Member of the Sustainable Development Corporate Governance Committee Member of Nomination and Remuneration Committee	-	-	-	-
	Spouse/ Minor child		-	-	-	-
13.	Mrs. Kanya Ruengprateepsang	Chief Financial Officer	120,000	40,000	160,000	0.010
	Spouse/ Minor child		-	-	-	-
14.	Mr.Thierry Defrene	Chief Operating Officer - Logistics and Procurement	50,000	200,000	250,000	0.016
	Spouse/ Minor child		-	-	-	-
15.	Mr. Christophe Bernard Voy	Chief Operating Officer - International Business	-	-	-	-
	Spouse/ Minor child		-	-	-	-
16.	Mr. Soranard Nantamontry	Chief Operating Officer - Thailand Business	428,500	-	428,500	0.027
	Spouse/ Minor child		-	-	-	-
17.	Mrs. Udomporn Punpatch	Chief People Officer	1,135,900	-	1,135,900	0.072
	Spouse/ Minor child		23,100	-	23,100	0.002

As of 31th December 2022, the Board of Directors collectively holds less than 25% of the Company's shares for both direct and indirect shareholding.

^{1/} The Board of Directors meeting No. 2/2022 resolved to designate Mr. Jean-Marie VERBRUGGHE as an independent director with effect from 18th February 2022 as Mr. Jean-Marie VERBRUGGHE meets all required qualifications for independent directors as stipulated by the Securities and Exchange Commission.

^{2/} Mr. Jacques Marcel Pastor resigned as member of the Executive Committee with effect from 1st October 2022.

^{3/} The Board of Directors resolved to appoint Mr. Frederic Roussel as member of the Executive Committee, Sustainable Development and Corporate Governance Committee and Nomination and Remuneration Committee with effect from 11th August 2022, 14th August 2022 and 10th November 2022, respectively.

INVESTOR RELATIONS



Investor Relations play a vital role in communication with external parties including investors, shareholders, stock analyst and etc. regarding the Company's business and performance. The Board of Directors has established several documents including the disclosure policy and Code of Ethics to ensure that information disclosure is in accordance with relevant laws and regulations, and aligns with good corporate governance and Best Investor Relation Award guidelines.

In 2022, the Company hosted and participated in several activities to connect with retail investors, institution investors and stock analysts. In adherence to good corporate governance and sustainable development, the Company presented information regarding sustainable development in the meeting and organized an ESG session to stock analysts on 12th July 2022.

Type of Meeting	Number of meeting
Analyst Meeting	4
ESG Session to Analyst	1
Opportunity Day by the Stock Exchange of Thailand	4
One-on-One Meeting	3

The Company's website plays a vital role as a communication channel with the investment community. The website features stock price quotes, publications including 56-1 One reports, financial statements, MD&A, company presentations, press release and etc.). The Company seeks and values feedback from external parties, and any information requests, comments and inquiries related to investor relations should be made to Mr. Thanapol Laosiripong at tel. +66 2273 6642, or by email at investors@tipcoasphalt.com.

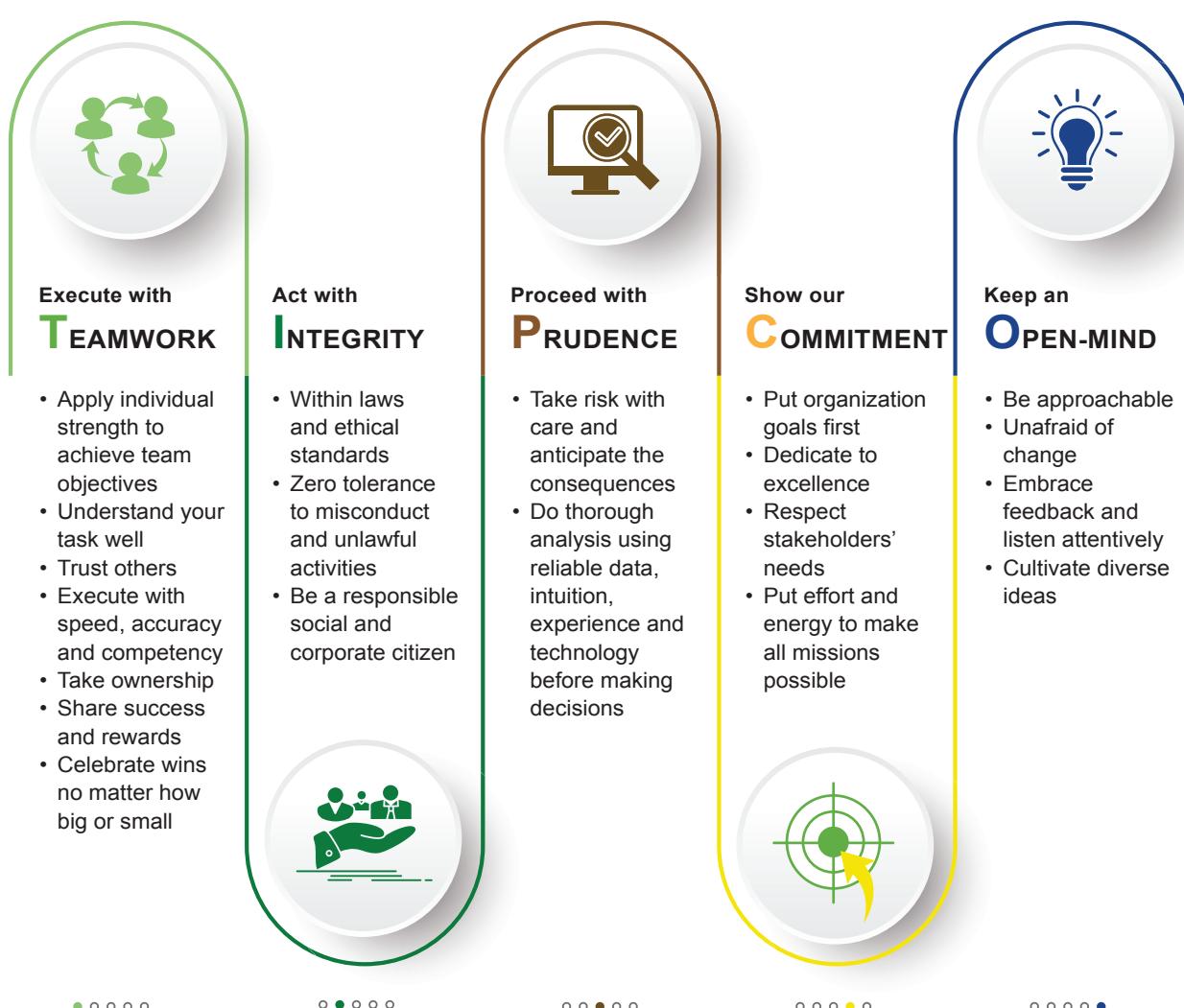
In accordance with the Group's commitment to continuous development, matters pertaining to investor relations including IR activities and investor/analyst feedback are reported to the Board of Directors on a regular basis.

In 2022, the Company's score on Best IR award was 86.58% which exceeded the average score of Companies with market capitalization between Baht 10,000 - 30,000 million.

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 - 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 in turn inspires 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:



In 2022, the acknowledgment rate of all employees of the Code of Ethics was 100%. In addition to acknowledgement, the Company launched a Code of Ethics test to ensure the highest level of understanding and awareness of all employees.

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 Sustainable and Development and Corporate Governance committee and the Board

of Directors. In 2022, the Board of Directors reviewed the Board charter and specified the additional role of the Chairman “To promote working relationships among Executives Directors, Non-Executive Directors and Independent Directors in the Board of Directors and to support CEO and the Management to perform duties in accordance with the Company’s policy”,

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 2022. The sub-principles which the Company has chosen not to follow are explained as follows:

Sub-principles	Explain
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.	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 CGR score of above 90% for the past four years, and further reflected in the votes received by independent directors in their re-election at the past annual general shareholders' meetings. The past re-election voting by shareholders stands at 98% on average.

Sub-principles	Explain
3.3.1 The board should establish a nomination committee. The majority of its members and the chairman should be independent directors.	The Nomination and Remuneration committee consists of 50% independent directors. The Chairman of the Committee remains independent. In addition, no action of the Committee will be taken in the absence of unanimous approval of all members attending the Committee meeting.
3.4.1 The board should establish a remuneration committee with the majority of its members and the chairman being independent directors. The remuneration committee is responsible for setting the remuneration policy.	
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.	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 is deemed adequate.
8.2.6 All directors and relevant executives should attend the meeting to answer questions from shareholders on company-related matters.	In the midst of the Covid-19 pandemic, it was challenging 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

6.3.3 Other practices



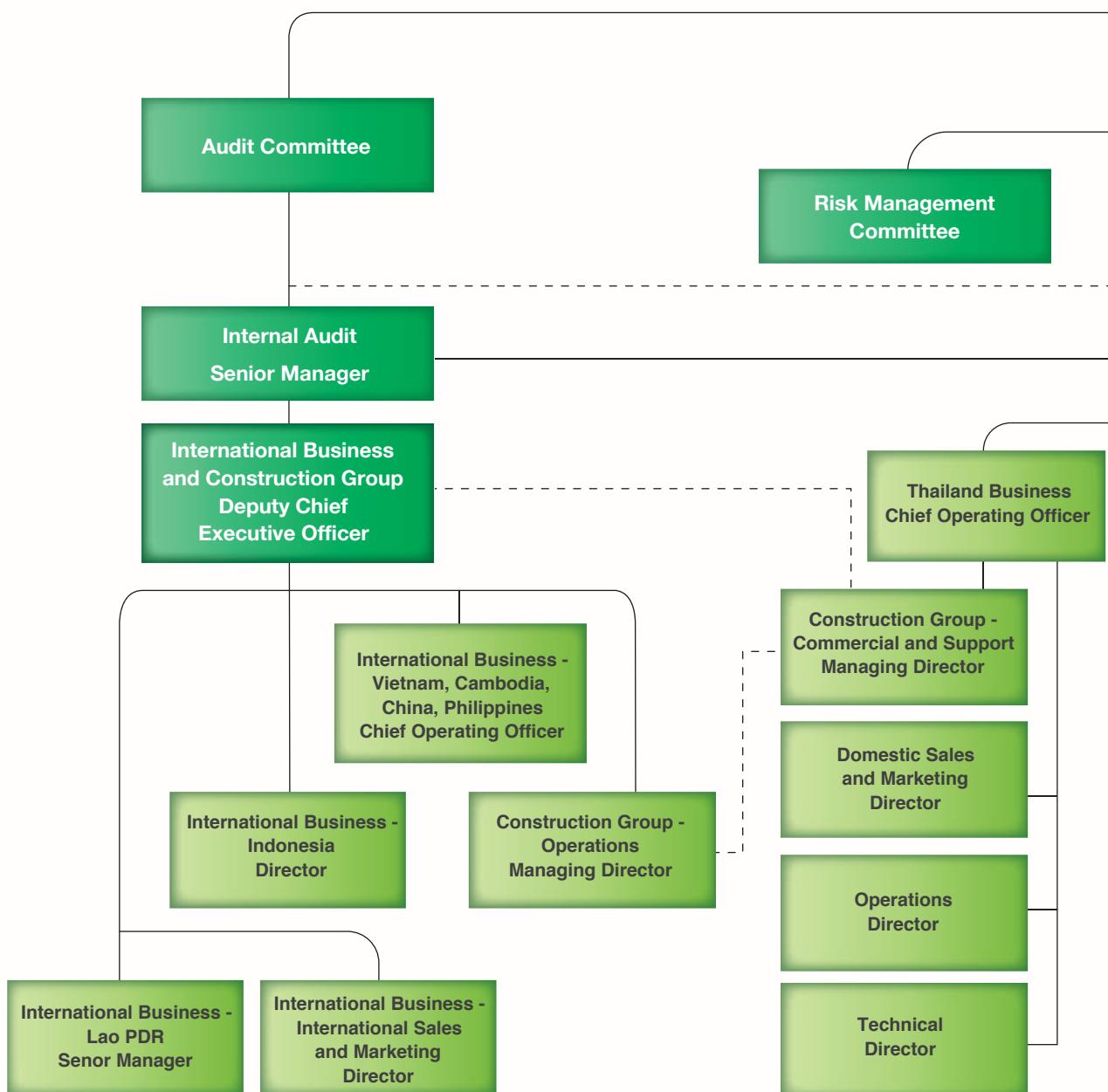
The Board of Directors recognizes the importance of corporate governance in the Company's sustainable development, creating shareholder value, and securing trust from all stakeholders, including shareholders, employees, customers, business partners, competitors, and creditors.

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 2022 (CGR), by the Thai Institute of Directors Association (IOD) for 5 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.



Finally, we are pleased to announce that the Company also received the Sustainability Disclosure Award in 2022 for 4 consecutive years from the ThaiPat Institute.

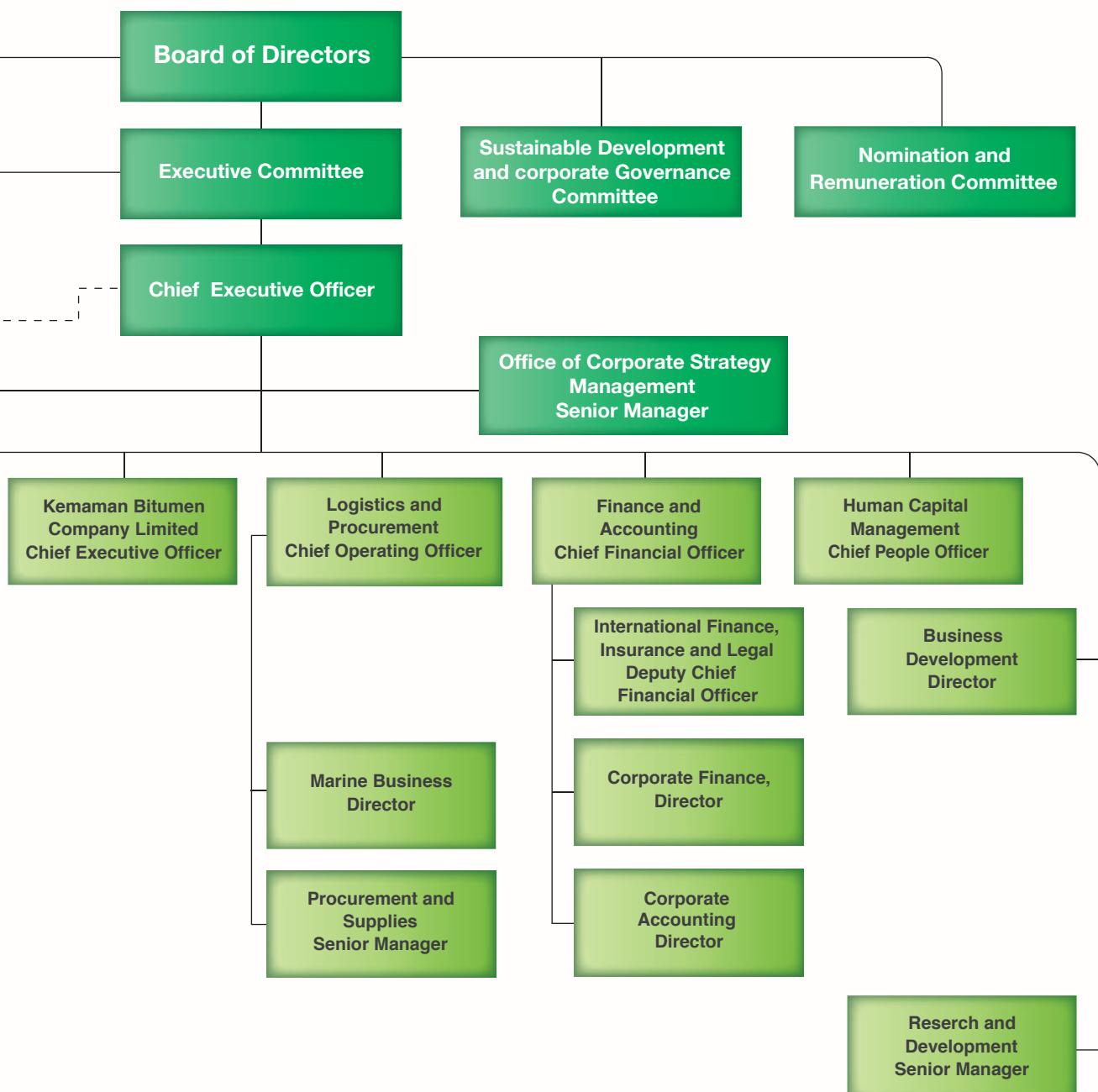
7. Corporate governance structure and key information about the Board, Sub-Committees, Management, Employees, and Others



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 Sustainable Development and 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 SUBAPHOLSIRI
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
Independent Director
Starting date of Directorship
7 April 2020



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



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
Director
Starting date of Directorship
1 August 2000



MR. CHAIWAT SRIVALWAT
Executive Director
Starting date of Directorship
13 February 2002



MR. FREDERIC ROUSSEL
Executive Director
Starting date of Directorship
11 August 2022

7.2.1 The Board Composition

- The Board consists of 12 directors, with one female member and 2 executive directors.
- As of 31st December 2022, there are 6 independent directors, accounting for 50% of board members.
- 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, and members are equipped with the necessary skills to match a range of business strategies These are

identified through director qualifications. For example, in appointing Mr. Frederic Roussel as a new member with effect from 11th August 2022, the Board of Directors considered Mr. Roussel's eligibility and qualifications as per the Company's Policy on Director Qualifications and Nomination. With this new appointment, the Board of Directors collectively covered the board skill matrix in accordance with our Policy on Director Qualifications and Nomination.

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 Serthtin	✓	✓	✓	✓		✓
10	Mr. Jacques Pastor	✓	✓		✓		
11	Mr. Chaiwat Srivalwat	✓	✓		✓	✓	✓
12	Mr. Frederic Roussel	✓	✓		✓	✓	✓

- There is also a wide variety of education and experience without discrimination across board members (detailed in Attachment 1).
- 10 non-executive directors have expertise in the Company's industry-specific knowledge.

7.2.2 The Board Information

The Board of Directors of Tipco Asphalt Plc. is composed of 12 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 Sustainable Development and 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 Sustainable Development and Corporate Governance Committee
Mr. Jean-Marie Verbrugghe	Independent Director
Mr. Frederic Gardes	Director
Ms. Laksana Supsakorn	Director
Mr. Somchit Sertthin	Director Member of Nomination and Remuneration Committee
Mr. Jacques Pastor	Director
Mr. Chaiwat Srivalwat	Chief Executive Officer Executive Director Member of Sustainable Development and Corporate Governance Committee
Mr. Frederic Roussel	Executive Director Member of Sustainable Development and Corporate Governance Committee Member of Nomination and Remuneration 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. To fulfill 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 and IT.
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 the corporate governance standards of the Board of Directors;
4. To preside over Shareholders' meetings, and conduct the meetings following the sequence of agendas in compliance with the Company's Articles of Association; and
5. To promote working relationships among Executives Directors, Non-Executive Directors and Independent Directors in the Board of Directors, and support CEO and Management to perform their duties in accordance with the Company's policy.
6. 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 Sustainable and Development and 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.

With the majority approval of its members, the Executive Committee may occasionally submit a written request to the Board of Directors for the latter 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 under the chart of authority.
 - Entry into any connected transaction, acquisition and disposition of asset transaction as stipulated under the rules and guidelines mandated by the Securities and Exchange Commission, and the Stock Exchange of Thailand that require 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. Make suggestions 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 charged with 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. SUSTAINABLE DEVELOPMENT AND CORPORATE GOVERNANCE COMMITTEE

The Board of Directors of Tipco Asphalt Public Company Limited (the Company) has a commitment to good corporate governance principles to achieve sustainable development. Therefore, the Board of Directors has resolved to rename the Corporate Governance Committee as the Sustainable Development and Corporate Governance Committee (the Committee) with effect from 17th February 2022. The Committee is in charge of the Company's sustainable development and corporate governance matters, while ensuring that the Company's business operation is in line with the directions, policies, and strategies devised to achieve sustainable development and corporate governance objectives.

Roles and Responsibilities of the Committee Sustainable Development

1. To establish the Company's sustainable development target, policy framework and guidelines in line with Company business operations to promote innovation across social and environmental matters, and propose them to the Board of Directors for consideration and approval;

2. To regularly review the Company's sustainable development target, policy framework and guidelines in response to changing global trends, business environments, laws, and international guidelines while taking into consideration shareholders' expectations, and present these to the Board of Directors for consideration and approval;
3. To acknowledge and consider sustainability strategies while promoting and supporting activities to achieve the Group's sustainability goals;
4. To consider the annual budgets related to sustainability issues and propose them to the Board of Directors for approval and/or acknowledgement; and
5. To regularly report sustainable development performance and progress including key sustainable development issues relating to the environment, social responsibility, and sustainability management to the Board of Directors for acknowledgement.

Corporate Governance

1. To establish and/or review corporate governance target, policy framework and guidelines in compliance with the laws and regulations, corporate governance guidelines from relevant agencies and/or regulators for approval/acknowledgement by the Board of Directors;
2. To monitor corporate governance performance is in line with the Group's policy and goals; and
3. To regularly report performance progress to the Board of Directors for acknowledgement.

General Matters

1. To oversee the disclosure of the Company's sustainable development and corporate governance information in the 56-1 One

Report, the Sustainability Report and any other relevant documents;

2. To perform any other duties assigned by the Board of Directors; and
3. To review this Charter regularly for appropriateness and timeliness.

The charter of the Sustainable Development and 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. Frederic Roussel	Vice Chairman / Executive Director
3. Mrs. Kanya Ruengprateepsang	Member / Executive Officer
4. Mr. Christophe Bernard Voy	Member / Executive Officer
5. Mr. Thierry Alain Simon Defrene	Member / Executive Officer
6. Mr. Soranard Nantamontry	Member / Executive Officer
7. Mr. Jacques Marechal	Member/ Secretary of Executive Committee

Mr. Frederic Roussel was appointed member of the Board of Directors in replacement of Mr. Hugues de Champs with effect from 11th August 2022.

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. Frederic Roussel	Member / Executive Director
4. Mr. Somchit Sertthin	Member / Director

Mr. Frederic Roussel was appointed as member of the Nomination and Remuneration Committee in replacement of Mr. Jacques Pastor with effect from 10th November 2022.

4. SUSTAINABLE DEVELOPMENT AND CORPORATE GOVERNANCE COMMITTEE

1. Mr. Phirasilp Subphaholsiri	Chairman / Independent Director
2. Mr. Niphon Suthimai	Member / Independent Director
3. Mr. Chaiwat Srivalwat	Member / Executive Director
4. Mr. Frederic Roussel	Member / Executive Director

Mr. Frederic Roussel was appointed member of the Sustainable Development and Corporate Governance Committee in replacement of Mr. Jacques Marechal with effect from 14th August 2022.

7.4 Executive Management

7.4.1 Names and Positions of Executives

The Board has set the roles and duties of Management in day-to-day business activities in line with the company's policies, chart of authority and Board resolutions. In 2022, there were 12 top executives as follows:

1. Mr. Chaiwat Srivalwat	Chief Executive Officer
--------------------------	-------------------------

2. Mr. Frederic Roussel	Deputy Chief Executive Officer - International Business
3. Mrs. Kanya Ruengprateepsang	Chief Financial Officer
4. Mr. Thierry Alain Simon Defrene	Chief Operating Officer - Logistics and Procurement
5. Mr. Christophe Bernard Voy	Chief Operating Officer - International Business
6. Mr. Soranard Nantamontry	Chief Operating Officer - Thailand Business
7. Mrs. Udomporn Punpatch	Chief People Officer
8. Mr. Jacques Marechal	Deputy Chief Financial Officer - International Finance, insurance and Legal
9. Ms. Auchcha Rattrakultip	Director - Corporate Finance
10. Mr. Martin Brzuska	Director - Marine Group
11. Mr. Chanchai Lohapratarn	Director Domestic Sales and Marketing
12. Mr. Suphat Pipitawan	Director - Operations

No.1-7 of whom are regarded as executives under SEC's definition (As of December 2022):

Mr. Frederic Roussel was appointed Deputy Chief Executive Officer - International Business in replacement of Mr. Hugues de Champs with effect from 1st August 2022.

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 find 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 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 2022, remuneration including salary, bonus and provident fund for 7 executives as defined by the SEC was Baht 71 million.

7.5 Personnel

On 31st December 2022, the Group had a total headcount of 2,153 employees spanning 1,673 persons in operation, 199 in management, and 281 in head office. The Group paid a total remuneration

to all employees of Baht 1,429 million in the form of salaries, overtime, living allowances, bonuses, 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.	RAVANA 1020 CO., LTD.	TIPCO MARITIME CO., LTD.	THAI SLURRY SEAL CO., LTD.	THONOMWONG CO., LTD.	SUBSIDIARY IN CAMBODIA	SUBSIDIARIES IN CHINA	SUBSIDIARIES IN MALAYSIA	SUBSIDIARIES IN SINGAPORE & VIETNAM	SUBSIDIARIES IN INDONESIA	SUBSIDIARY IN LAO	Total
Operation (person)	232	57	47	37	44	38	-	38	162	446	74	41	159	134	164	-	1,673
Managements (person)	74	4	2	-	-	-	-	3	9	30	6	4	33	17	15	2	199
Head office (person)	95	3	4	-	-	-	-	20	12	30	20	6	14	25	28	24	281
Total (person)	401	64	53	37	44	38	0	61	183	506	100	51	206	176	207	26	2,153
Remuneration for employee (million Baht)	512	37	28	33	36	33	-	28	75	228	38	55	170	122	29	6	1,429

Significant changes in number of employee for the past three years

Total employee number for the years 2022, 2021 and 2020 were 2,153, 2,236 and 1,711 persons respectively. The increase from 2020 to 2021 was mainly the result of the Group's acquisitions 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 the end of 2022, 916 employees in Thailand are participating in the provident fund scheme, which accounts for 74.47% of a total number of 1,230 employees.

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, or by email at investors@tipcoasphalt.com.

7.6.3 Audit Fee

For the fiscal year 2022, the Company and its subsidiaries paid 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	9.84

Non-audit fee

Company/ Subsidiary	Scope of service	Total (THB Million)
Tipco Asphalt Public Company Limited	Tax seminar and service fee for compliance with law and regulation	0.77
Subsidiaries in the Group	Service fee for compliance with law and regulation	2.01

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 directorsshall 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 professioal 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 6 independent directors out of a total 12 directors, representing 50% 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 directornomination, the N&R committee may consider the director pool from the IOD for potential candidates, if any.

In 2022, there was a new director appointment. In the process, the Board of Directors followed recommendations from the N&R committee which, reviewed and confirmed that the Board of Directors with the new director collectively had between them the required skills to comply with policies on director qualifications and nomination.

In our commitment to enhancing the minority right of shareholders, prior to the 2023 Annual General Meeting (AGM), shareholders of the Company were entitled to propose agenda items. Shareholders were allowed to exercise such rights from the period 3rd October 2022 to 30th December 2022 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

Mr. Frederic Roussel was appointed as a new member of the Board of Directors with effect from 11th August 2022. In response to this, the Company arranged an orientation program to inform him of the Group's business policies, capital structure, shareholding structure, business performance, information systems, code of ethics and related laws and regulations. Moreover, each new 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 in-house and external training and in 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 2022, the Company conducted in-house training for 11 members of the Board of Directors and top executives covering the topics of conflict of interest and insider trading. The session was presented by a recognized well established lawyer.



External training/seminar of directors and executives in 2022 can be summarized as follows:

Name	Course	By
1. Mr. Chaiwat Srivalwat	2022 CEO Club 2022 a Virtual Board meeting" - Opportunity and Challenge in Financial System and Thai Capital Market	The Stock Exchange of Thailand
2. Mrs. Kanya Ruengprateepsang	- CFO Introduction to Sustainable Finance - CFO Role of CFO in sustainability - CFO Digital Asset and CFO role - CFO PDPA for Accounting and Finance	Thai Listed Companies Association.

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 3.89 out of 4 and 3.87 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 Sustainable Development and 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	SD&CG	EC	AC	N&R	SD&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 2022 were summarized as follows:

Sub-committees	Result of the assessment	
	Collective assessment	Individual assessment
1. Executive Committee	3.80	3.75
2. Audit Committee	3.98	3.94
3. Nomination and Remuneration Committee	3.99	3.95
4. Sustainable Development and Corporate Governance Committee	3.81	3.94

The Company records and reports the assessment results of both the Board of Directors and the sub-committees to all 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) possession of 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.

As part of the assessment of CEO, 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

In 2022, assessment score from self-Assessment form was 3.90 out of 4.00.

SUCCESSION PLAN

The Tipco Asphalt group has an executive succession plan in place. The Board of Directors has assigned the N&R committee to be responsible for designing suitable succession plans for the Chief Executive Officer and for other top executives. The N&R Committee reports progress related to this to the Board of Directors on a regular basis.

In 2022 the N&R Committee reviewed the succession plan for the positions of CEO and other senior executives (N-1 and N-2). Preparation of candidates for upper management positions helps Tipco Asphalt manage risks and ensure business continuity. According to the Succession Plan, 3 nominated C-Suites are selected to undertake the development program. Such nominees shall possess all the desired qualifications including the necessary experience and knowledge, and demonstrate a profound understanding of the asphalt business, in addition to having a good reputation, leadership, a record of accomplishment, commitment and dedication, and other relevant competencies. This is in accordance with the Business Drivers which were conducted under the consultancy of an external expert - Development Dimensions Internationals Inc (DDI).

The N&R committee also continued to follow up on the development of the succession plan for the position of Chief Executive Officer. The progress is reported for the Board of Directors' acknowledgement on an annual basis.

Coaching sessions for the successors have been conducted throughout the year 2022. From the coaching sessions, the successors have developed action plans to proceed. They have agreed to review their progress every six months with the mentors, including the CEO and designated executives. The assessment processes are set to be conducted again at the end of 2023.

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 ten 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 2022 by all Directors is summarized as follows:

Name	Position	Board of Directors Meeting	Audit Committee Meeting	Nomination and Remuneration Committee Meeting	Sustainable Development and Corporate Governance Committee Meeting	Shareholders' Meeting
Mr. Chainoi Puankosoom	Chairman	6/6	-	-	-	1/1
Mr. Koh Ban Heng	Vice Chairman / Independent Director Member of Nomination and Remuneration committee	6/6	-	2/2	-	0/1
Mr. Phirasilp Subhapholsiri	Independent Director Chairman of the Audit Committee Chairman of the Sustainable Development and Corporate Governance Committee	6/6	12/12	-	4/4	1/1
Mr. Nopporn Thepsithar	Independent Director Chairman of the Nomination and Remuneration committee Member of Audit Committee	6/6	12/12	2/2	-	1/1
Mr. Niphon Suthimai	Independent Director Member of the Audit Committee Member of the Sustainable Development and Corporate Governance committee	6/6	12/12	-	4/4	1/1
Mr. Jean-Marie Verbrugghe	Independent Director	6/6	-	-	-	1/1
Mr. Frederic Gardes	Director	5/6	-	-	-	0/1
Ms. Laksana Supsakorn	Director	6/6	-	-	-	1/1
Mr. Somchit Sertthin	Director Member of Nomination and Remuneration committee	6/6	-	2/2	-	1/1
Mr. Jacques Pastor	Director ^{2/} Member of Nomination and Remuneration committee ^{2/}	6/6	-	2/2	-	1/1

Name	Position	Board of Directors Meeting	Audit Committee Meeting	Nomination and Remuneration Committee Meeting	Sustainable Development and Corporate Governance Committee Meeting	Shareholders' Meeting
Mr. Chaiwat Srivalwat	Executive Director Member of the Sustainable Development and Corporate Governance Committee	6/6	-	-	4/4	1/1
Mr. Frederic Roussel	Executive Director ^{3/} Member of the Sustainable Development and Corporate Governance Committee ^{3/} Member of the Nomination and Remuneration Committee ^{4/}	1/1	-	-	1/1	-
Mr. Jacques Marechal	Executive Director ^{3/} Member of the Sustainable Development and Corporate Governance Committee ^{3/}	5/5	-	-	3/3	1/1
Mr. Hugues de Champs	Executive Director ^{5/}	2/2	-	-	-	1/1
Mr. Sitilarb Supsakorn	Executive Director ^{5/}	2/2	-	-	-	1/1

^{1/} In the Board of Directors meeting No.6/2022 on 9th November 2022, there was an agenda regarding discussion among members of the Board of Directors in the absence of Executive Directors. After the agenda, summary of comments from non-executive directors was reported to executive directors including Chief Executive Officer.

^{2/} Mr. Jacques Pastor resigned from member of the Executive Committee and Nomination and Remuneration Committee with effect from 1st October 2022. Nevertheless, he remains member of the Board of Directors.

^{3/} The Board of Directors resolved to appoint Mr. Frederic Roussel as member of the Board of Directors and Sustainable and Development Committee in replacement of Mr. Jacques Marechal with effect from 11th August 2022 and 14th August 2022, respectively.

^{4/} The Board of Directors resolved to appoint Mr. Frederic Roussel as member of the Nomination and Remuneration Committee in replacement of Mr. Jacques Pastor with effect from 10th November 2022.

^{5/} Given that Mr. Hugues de Champs and Mr. Sitilarb Supsakorn wished to not renew their membership of the Board of Directors at the 2022 AGM, their term as members of the Board expired on 8th April 2022.

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 are benchmarked against the average remuneration of companies in relevant industries. The remuneration consists of fixed remuneration and variable remuneration.

At the 2022 AGM, the meeting resolved to

- approve the lump sum 2022 remuneration of the Company in the amount of Baht 16,468,000 million for all the Directors and members of the sub-committees.
- authorize the Board of Directors to determine variable remuneration which shall be subjected to the Company's performance.

Fixed Remuneration

Position	Amount per person (Baht)
Chairman of the Board	600,000
Independent Director/Executive Director/Director	400,000
Chairman of Audit committee	500,000
Audit committee member	400,000
N&R committee member	60,000
Chairman of SD&CG committee	100,000
SD&CG committee member	80,000

REMUNERATION FOR THE BOARD AND EXECUTIVES

1. In 2022, total annual fixed and variable remuneration stood at Baht 7,087,685 Baht 9,392,151. As for Extra-variable remuneration, the 2022 AGM held on 8th April 2022 resolved to approve the payment of extraordinary variable remuneration to all non-executive members at the maximum of 0.5 time of annual fixed remuneration or 1,900,000 Baht.
2. In 2022, there was no payment of non-financial remuneration to the Board of Directors.
3. Other remuneration: -None-

Name	Scope of Authority	2021			2022		
		Fixed	Variable ^{2/}	Extra ^{3/}	Fixed	Variable	Extra
1. Mr. Chainoi Puankosoom	Chairman / Independent Director	600,000	600,000	575,410	600,000	1,200,000	300,000
2. Mr. Koh Ban Heng	Vice Chairman / Independent Director	400,000	400,000	400,000	400,000	800,000	200,000
	Member of N&R Committee	57,863 ^{4/}	-	-	60,000	-	-
3. Mr. Phirasilp Subhapholsiri	Independent Director	400,000	400,000	400,000	400,000	800,000	200,000
	Chairman of AC	500,000	-	-	500,000	-	-
	Chairman of SD&CG Committee	100,000	-	-	100,000	-	-
4. Mr. Nopporn Thepsithar	Independent Director	400,000	400,000	400,000	400,000	800,000	200,000
	Chairman of N&R Committee	60,000	-	-	60,000	-	-
	Member of AC	400,000	-	-	400,000	-	-
5. Mr. Niphon Suthimai	Independent Director	400,000	400,000	400,000	400,000	800,000	200,000
	Member of AC	385,753 ^{5/}	-	-	400,000	-	-
	Member of SD&CG Committee	80,000	-	-	80,000	-	-
	Member of N&R Committee	2,137 ^{4/}	-	-	-	-	-
6. Mr. Jean-Marie Verbrugghe	Independent Director	400,000	400,000	293,989	400,000	800,000	200,000
7. Mr. Frederic Gardes	Director	400,000	400,000	400,000	400,000	800,000	200,000
8. Ms. Laksana Supsakorn	Director	400,000	400,000	424,590	400,000	800,000	200,000
9. Mr. Somchit Sertthin	Director	400,000	400,000	-	400,000	800,000	200,000
	Member of N&R Committee	60,000	-	-	60,000	-	-
10. Mr. Jacques Pastor	Director	400,000	400,000	-	400,000	800,000	-
	Member of N&R Committee	60,000	-	-	45,000 ^{9/}	-	-
11. Mr. Chaiwat Srivalwat	Executive Director / Chief Executive Office	400,000	400,000	-	400,000	712,865	-
	Member of SD&CG Committee	80,000	-	-	80,000	-	-
12. Mr. Frederic Roussel ^{10/}	Executive Director	-	-	-	155,342	279,286	-
	Member of SD&CG Committee	-	-	-	30,411	-	-
	Member of N&R Committee	-	-	-	8,548 ^{9/}	-	-
13. Mr. Jacques Marechal ^{10/}	Executive Director	400,000	400,000	-	244,658	-	-
	Member of SD&CG Committee	80,000	-	-	48,932	-	-
14. Mr. Parnchalerm Sutatam ^{7/}	Independent Director	-	-	385,793	-	-	-
	Executive Director	400,000	400,000	-	107,397	-	-
15. Mr. Sitilarb Supsakorn ^{8/}	Executive Director	400,000	400,000	-	107,397	-	-
16. Mr. Hugues de Champs ^{8/}		7,665,753	5,800,000	3,679,782	7,087,685	9,392,151	1,900,000

Total

- 1/ 2021 fixed and variable remuneration disclosure in 2022 56-1 One report is based on AGM approval in 2021 whereas 2021 fixed and variable remuneration in 2021 56-1 One report was based on cash payment basis.
- 2/ Subject to the Company's profitable performance and approval by the Board of Directors for 2021, the 2020 AGM resolved that variable remuneration payments not exceeding total annual fixed remuneration of all Board of Directors members shall be considered and paid by the Company.
- 3/ 2021 AGM resolved to approve extra variable remuneration for all non-executive board members from 2020's profitable operations of the Company. For directors whose directorship is less than one year, he/she shall receive his/her remuneration on a Pro-Rata basis. The payment was made by the resolution of the Board of Directors meeting No.2/2021 on 16 February 2021.
 - o Mr. Chainoi Puankosoom was appointed Chairman of the Board of Directors in replacement of Ms. Laksana Supsakorn with effect from 15th February 2020.
 - o Mr. Jean-Marie Verbrugge was appointed by the 2020 AGM as member of the Board of Directors with effect from 7 April 2020.
 - o Mr. Hugues de Champs was appointed by the Board of Directors as a member of the Board of Directors in replacement of Mr. Herve Le Bouc with effect from 17th February 2020.
- 4/ Mr. Koh Ban Heng was appointed member of the N&R committee in replacement of Mr. Niphon Suthimai with effect from 14th January 2022.
- 5/ Mr. Niphon Suthimai was appointed member of the Audit Committee in replacement of Mr. Parnchalerem Sutatam with effect from 14th January 2021.
- 6/ Mr. Frederic Roussel was appointed as member of the Board of Directors and Sustainable and Development Committee in replacement of Mr. Jacques Marechal with effect from 11th August 2022 and 14th August 2022, respectively
- 7/ Mr. Parnchalerem Sutatam, Independent Director, passed away on 19th December 2020. The 2021 AGM approved the payment of the variable remuneration and extra variable remuneration from 2020's profitable operations of the Company to the late Mr. Parnchalerem Sutatam of Baht 385,793 for each type of remuneration on a pro-rata basis.
- 8/ Given that Mr. Hugues de Champs and Mr. Sitilarb Supsakorn wished to not have their candidacy as members of the Board of Directors renewed at the 2022 AGM, their term as Board members expired on 8th April 2022.
- 9/ Mr. Jacques Pastor resigned from member of the Nomination and Remuneration committee with effect from 1st Oct 2022. Mr. Frederic Roussel was appointed member of the Nomination and Remuneration committee in replacement of Mr. Jacques Pastor with effect from 10th November 2022.

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 the 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 2022, monitoring compliance with the Corporate Governance Policy and Guidelines was presented during the quarterly management review. The subsequent results showed that the Company had completely implemented the guidelines for each issue. Monitoring compliance with the 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).

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 2022, newly appointed members of the Board of Directors filed forms to report on the interests of Directors and Executives, and 100% of defined

staffs signed the Conflict of Interest declaration form. Above all, there was no violation of conflict of interest.

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 2022, directors and top executives filed transactions as per public disclosure on <https://market.sec.or.th/public/idisc/en/r59>. Summary of shareholding of director and top executives are reported to the Board of Directors on quarterly basis. There were no transactions during the blackout period.

3. Anti-Corruption

The Board of Directors of the Company adopted an anti-corruption policy with the 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 acknowledge the Code of Ethics annually, which includes anti-corruption prevention. In 2022, the acknowledgment rate of the Code of Ethics by employees was 100%. In addition to this, the Company has introduced a Code of Ethics test to ensure employees' understanding of its terms remains consistently sound.

Finally, the Company resolved to implement refresher training sessions covering the Code of Ethics and the Anti-corruption Policy and Guidelines on 24th November 2022. There were two sessions: one in Thai with 34 participants and another in English with 5 participants.

There were no cases violating the Group's Anti-Corruption policy and guidelines in 2022.

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

The Company encourages its Directors to attend the Anti-Corruption for Executives (ACEP) training course, while employees are encouraged to regularly participate in 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. Risk Assessment is conducted in accordance with the guidelines of the "Self-Evaluation Tool for Anti-Corruption System Development" Version 4.0, which covers risk for subsidiaries. The assessment template includes business activity, risk type, risk description, likelihood, impact, risk score, key control. In addition, the Company's employees also attended the "Working Paper for Better Corruption Prevention" course.

In addition to policy implementation and frequent 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 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 International Anti-Corruption Day (Thailand) at Muang thongthaini, Nonthaburi.
- 6th September 2018: Anti-Corruption Day with the theme “คนไทย ตีบั้นธุรกิจ” at Bhiraj Tower at Bangkok International Trade & Exhibition Centre (BITEC).
- 7th December 2018: International Anti-Corruption Day (Thailand) at Muangthongthaini, Nonthaburi.
- 6th September 2019: Anti-Corruption Day with the theme “รวมพลัง อาสาต้านโกง” 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: International Anti-Corruption Day (Thailand) “เดินหน้า ล้ำโง” at Muangthongthani, 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 “คุบเด็กสร้างชาติ” through Facebook live.

9th December 2021: International Anti-Corruption Day (Thailand) “Zero Tolerance ไม่ทำ ไม่เป็น ไม่ยอม รวมไทยต้านโกง” through Facebook live.

- 6th September 2022: Anti-Corruption Day with the theme “ผู้นำ...กับการปราบโกง” at Bang Sue Grand Station.
- 9th September 2022: International Anti-Corruption Day (Thailand) “Zero Tolerance ไม่ทำ ไม่เป็น ไม่ยอม รวมไทยต้านโกง” through Facebook live.



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 the reporting of violations of or non-compliance with the Code of Ethics are known by all employees and must be observed.

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 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 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 2022, there were 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 2022, 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 2022, the AC held 12 meetings, with attendance as tabulated below:

Name	Meeting Attendance/ Total
Mr. Phirasilp Subhapholsiri	12/12
Mr. Nopporn Thepsithar	12/12
Mr. Niphon Suthimai	12/12

Management, the external auditor and the IAD team attend these AC meetings as necessary. In 2022, there was AC meeting between AC members and the external auditor 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 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 2022 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 2022. This included oversight of new reviews as well as follow-up reviews to ascertain the completion of agreed actions by management.

Despite continuing disruptions in 2022 caused by the Covid-19 pandemic, the IAD managed to perform reviews encompassing Plant operations in Thailand, human resources and payroll, functions in head offices of overseas operations, key procurement activities, the Charts of Authority governing the Group's activities, and last but not least, of anti-corruption key controls for the Company's operations in Thailand.

Separately, the AC is pleased to report that all team members of the IAD had successfully completed both parts of the Certified Professional Internal Auditors of Thailand (CPIAT) exams as conducted by The Institute of Internal Auditors of Thailand (IIAT) in January 2022. This initiative was also fully supported by senior management of the Company, and underscores the Company's commitment to developing its employees in the IAD.

APPOINTMENT OF THE EXTERNAL AUDITOR FOR 2023

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 2023. Consequently, the AC has proposed the same to the Board for approval by the shareholders at the Annual General Meeting of 2023.

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.

A handwritten signature in black ink, appearing to read "Phirasilp Subhapholsiri".

Mr. Phirasilp Subhapholsiri
Chairman of the Audit Committee

8.3 Report of Other Sub-Committees

REPORT OF THE SUSTAINABLE DEVELOPMENT AND CORPORATE GOVERNANCE COMMITTEE

The Board of Directors approved the renaming of the Corporate Governance committee to the “Sustainable Development and Corporate Governance” committee (SD&CG committee) in February 2022, as reflected in the roles and responsibilities of SD&CG committee members, specified in the charter.

The SD&CG committee consists of 2 independent directors (Mr. Phirasilp Subhapholsiri and Mr. Niphon Suthimai), and 2 executive directors (Mr. Chaiwat Srivalwat and Mr. Frederic Roussel).

In 2022, the SD&CG Committee continued to perform its duties as set forth in the Sustainable Development and Corporate Governance Committee Charter and held a total of 4 meetings. The main duties performed by the SD&CG Committee were as follows:

Sustainable Development

- Considered and approved Sustainable Development plan and key targets for 2022;
- Reviewed Sustainable Development quarterly performances and key KPI results for 2022;
- Considered and approved the preparation of the Company's Sustainability Report 2021 including the conduct of Sustainability Materiality Assessment Survey to accommodate the SD Report;
- I am pleased to inform that in 2022 the Company received the Sustainability Disclosure Award from the Thaipat Institute for the fourth consecutive year;

Corporate Governance

- Reviewed and proposed to the Board continuous improvements on corporate governance (CG) principles, policies and guidelines in accordance with the Corporate Governance of Thai Listed Companies 2022 (CGR) by the Thai Institute of Directors Association (IOD). The Company was rated “Excellent or 5 stars”, i.e. the highest ranking of CGR for the fifth consecutive year;
- Reviewed and proposed to the Board continuous improvements on good practice of Annual General Meeting in accordance with the AGM Checklist by the Thai Investor Association. The Company was rated 98% out of 100% which exceeded the average score of 96%.
- Reviewed and proposed to the Board the submission of a Self-Evaluation Tool for Anti-Corruption System Development to ensure the Company's 2nd recertification under Thailand Collective Action Against Corruption (CAC).
- 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) relevant to the Company's business.



Mr. Phirasilp Subhapholsiri

Chairman of the Sustainable Development and 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. Frederic Roussel and Mr. Somchit Serthtin.

In 2022, the N&R Committee performed its duties in accordance with the Charter, and performed other duties as assigned by the Board of Directors. In 2022, 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 2022 Annual General Meeting to the Board of Directors and shareholders and who resigned in 2022. 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 is 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, the results of which are considered as part of CEO evaluation.

4. Proposal of remuneration

The N&R committee took into account the 2020 market survey of Directors remuneration (conducted every 2 years) of listed companies by the Institute of Directors. The survey clearly showed that the fixed remuneration of the Company's Board of Directors and its sub-committees were comparable with others in the Property and Construction and Resource industries.

- The N&R committee proposed total remuneration on a lump sum basis including fixed and variable remuneration at the maximum of 16,468,000 Baht. This includes fixed and variable remuneration for all members of the Board of Directors and Sub-committees. The remuneration per position remains unchanged since 2021.
- 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 goals, long-term strategies and assessment results.
- 5. The N&R committee encourages continuous development among members of the Board of Directors by suggesting relevant training courses and seminars offered regularly by the authorities and private entities.



Mr. Nopporn Thepsithar

Chairman of the Nomination &
Remuneration Committee

Report on Risk Management Committee

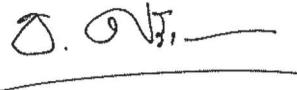
The Company recognizes the importance of enterprise risk management (ERM) with the implementation of a framework, relevant policies, and the development of enterprise risk management in accordance with international standards. This is to ensure the Company's key objectives and targets are met successfully and efficiently, while increasing the Company's resiliency in dealing with diverse fluctuations in rapidly changing market environments.

In 2022, the Company's Risk Management Committee (RMC) comprised eighteen members: two of whom; namely, the Chairman of the Risk Management Committee and Mr. Frederic Jacques Maurice Roussel, also served as members of Board of Directors of the Company. Seven of the RMC members also served as members of Executive Committee.

Name	Position
Mr. Chaiwat Srivalwat	Chairman of Risk Management Committee
Mr. Frederic Jacques Maurice Roussel	Member
Miss Kanya Ruengprateepsang	Member
Mr. Thierry Alain Simon Defrene	Member
Mr. Christophe Bernard Voy	Member
Mr. Soranard Nantamontry	Member
Miss Udomporn Punpatch	Member
Mr. Jacques Louis Yves Marie Marechal	Member
Mr. Sanjay Grover	Member
Mr. Suphat Pipitawan	Member
Mr. Chanchai Lohapratarn	Member
Mr. Martin Brzuska	Member
Mr. Kris Sertthin	Member
Mr. Fabien Stephane Luc Gil	Member
Mr. Surapon Katekaew	Member
Mr. Ismail Bin Abdul Hamid	Member
Mr. Tanawat Tangudomlert	Member
Mr. Puwanat Wantanachaisaeng	Member

In 2022, the Risk Management Committee arranged one RMC meeting, which all Committee members participated in. The meeting agendas focused primarily on developing enterprise risk management. The Risk Management Committee then reported the meeting summary to the Executive Committee for consideration. Major details of the meeting can be summarized as follows:

- Revision of the Group's Enterprise Risk Management Policy. This year, the ERM Policy was revised to add a role to the Audit Committee on assisting in reviewing the effectiveness, suitability and adequacy of the risk management system and internal risk controls of the Group. Meanwhile, the Enterprise Risk Management Guideline Manual was also revised to ensure full consistency with such ERM Policy revisions.
 - Revision on corruption risk register. This was done in accordance with requirements set forth by the Private Sector Collective Action against Corruption (CAC) for the Company's CAC membership re-certification in 2023.
- Summaries on Enterprise Risk Management progresses in 2022 and work plan for 2023. In 2022, the Group achieved great progress in enterprise risk management; namely, comprehensive risk review, ISO31000: ERM recognition including completion of ERM exercise implementation at the Group's subsidiary in Indonesia (ABS). As for 2023, the Risk Management Committee plans to extend ERM exercise implementation at the Construction Business and subsidiary in Cambodia (TAC).
- Revision of the Group's Top Corporate Risks. These include key business risks and emerging risks such as pandemics, cyber security risks, and personal data protection risk. The main areas of focus centered the impact/likelihood assessment of key risks and the consideration of other potential risk factors that could impact the Group in the near future.



Mr. Chaiwat Srivalwat

Chairman of Risk Management
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 recent 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 16 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 2008 - 2012	Senior Manager - Internal Audit/ Tipco Asphalt Public Co., Ltd. Associate Director - Advisory Services/ PricewaterhouseCoopers FAS Ltd.

The Senior Manager - Internal Audit reports functionally to the AC and administratively to the Chief Executive Officer. 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

Connected transaction between the Company and/or subsidiary and connected party shall be transacted in accordance with section 89/12 of the Securities and Exchange Act B.E. 2535. The Board of Directors approved the general commercial conditions for ordinary business transaction and ordinary business support transaction which can be executed by management 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 summary of ordinary business support transactions and Ordinary business support transactions with general commercial condition were as follows:

Unit: THB Million	Related Companies, Details and Amount	2021	2022	Pricing Policy
Sales and Services Provided to	Asia Bitumen Trading Pte Ltd.	Sales - Asphalt Cement	376	35
	Phoenix Asphalt Philippines Inc.	Sales - Asphalt Cement	308	499
	Thanomwongse Service Company Limited	Sales - Asphalt Cement, oil and provide services	6	-
	Thai Slurry Seal Company Limited	Sales - Asphalt Cement, oil and provide services	8	-
	Colas S.A. (Colas S.A. Sami Bitumen Technology and Highway Resource Group)	Sales - Asphalt Cement and provide services	1,866	2,034
	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	2
	Nawarat Patanakarn Public Company Limited (Joint arrangements)	Sales - Asphalt cement and oil and provide service and revenue from construction contract	114	388
	Hadyai Rueang Chai Construction Ltd., Part. (Joint arrangements)	Sales-Asphalt Cement and provide service and revenue from construction contract	33	109
	ISCO Industry PTE	Sales - Aqua Quick	-	13
	Borneo Asphalt Sdn. Bhd.	Sales - Asphalt Cement and provide services	-	248
	Continental Bitumen Limited	Sales - Asphalt Cement and provide services	153	400
	Seneoudom Sole Co.,Ltd.	Sales - Asphalt cement	14	20
	Narval Group (Atlantic, Baltic, MC Asphalt)	Other services	-	11
Total Revenues		2,883	3,762	

Unit: THB Million		Related Companies, Details and Amount	2021	2022	Pricing Policy
Rental and Service Expenses Paid to	Siam Container Transport and Terminal Co., Ltd	Service - Transportation & Customs Clearance	5	8	Market price/ Contract price
	Tipco F&B Co., Ltd.	Other services	3	3	
	Tipco Tower Company Limited	Rental office and other services	38	33	
	Marketing Consultant Co., Ltd.	Other services	1	1	
	PT SARANA DISTRIBUSI ASPHALT NUSANTARA	Other services	3	3	
	Colas S.A.	Other services	40	42	
	Ruamsupsin Co., Ltd.	Other services	4	4	
	ISCO Industry PTE	Other services	-	3	
	Asia Bitumen Trading Pte Ltd.	Purchases goods	-	272	
	Other Joint Operators (Nawarat Patanakarn PCL., Advance Prefeb Co.,Ltd. Hadyai Rueng Chai Construction)	Other services	218	332	
Sub Total			312	701	
Technical Assistance Fee Expenses Paid to	Colas S.A.	Technical assistance fee	42	44	Contract price
Total Expenses			354	745	

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>

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/>

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 were 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 Company's external auditor

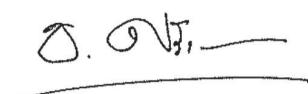
has reviewed and audited the financial statements and expressed an unqualified opinion in the auditor's report.

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 2022 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

- ▲ Financial Statements
- ▲ Attachment 1: Details of directors, executives, controlling persons, 90 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
- ▲ Attachment 2: Details of the directors of subsidiaries
- ▲ Attachment 3: Details of the Heads of the Internal Audit and Compliance Units
- ▲ Attachment 4: Assets for business undertaking and details of asset appraisal
- ▲ Attachment 5: Unabridged policy and guidelines on corporate governance and unabridged code of businessconduct prepared by the Company



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 2022, 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 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 2022, 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 including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. 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 32 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.

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: 9 February 2023

Tipco Asphalt Public Company Limited and its subsidiaries**Statement of financial position****As at 31 December 2022**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements		
		2022	2021	2022	2021	
Assets						
Current assets						
Cash and cash equivalents		2,603,494,942	1,540,617,230	546,475,445	271,318,056	
Trade and other receivables	6, 7	6,988,214,278	4,236,717,655	5,644,218,500	2,886,098,893	
Contract assets	8	1,146,128,460	872,860,668	-	-	
Short-term loans to related parties	6	40,928,476	25,226,121	110,000,000	110,000,000	
Inventories	9	4,982,918,932	6,370,552,623	3,774,333,213	5,173,512,611	
Current tax assets		66,715,497	35,036,659	-	-	
Derivative - commodity forward contracts	32	128,761,876	154,581,742	128,761,876	154,581,742	
Advance payments for inventories and services	6	307,809,850	398,863,799	1,404,748	6,217,578	
Other current assets		241,904,611	190,163,928	50,242,971	39,692,693	
		16,506,876,922	13,824,620,425	10,255,436,753	8,641,421,573	
Assets held for sale	10	-	446,235,018	-	-	
Total current assets		16,506,876,922	14,270,855,443	10,255,436,753	8,641,421,573	
Non-current assets						
Investments in subsidiaries	11	-	-	8,376,058,878	8,315,283,014	
Investments in joint ventures	12	135,315,828	132,567,628	67,552,611	67,552,611	
Investments in associates	13	507,246,214	479,190,367	18,403,580	18,403,580	
Derivative - commodity forward contracts	32	-	33,720,679	-	33,720,679	
Long-term loans to related parties	6	-	-	514,356,144	675,244,405	
Investment properties	14	189,032,559	189,032,559	94,342,234	94,342,234	
Property, plant and equipment	15	7,586,835,835	8,250,196,593	745,966,145	846,238,620	
Right-of-use assets	20	739,555,981	728,649,714	89,752,128	102,748,737	
Goodwill		195,932,109	195,932,109	-	-	
Intangible assets	16	191,105,885	266,384,079	19,713,781	32,205,154	
Deferred tax assets	25	107,256,152	177,023,897	29,025,367	108,470,849	
Other non-current assets		98,025,452	77,348,958	3,242,252	4,032,717	
Total non-current assets		9,750,306,015	10,530,046,583	9,958,413,120	10,298,242,600	
Total assets		26,257,182,937	24,800,902,026	20,213,849,873	18,939,664,173	

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 2022**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements		
		2022	2021	2022	2021	
Liabilities and shareholders' equity						
Current liabilities						
Short-term loans from financial institutions	17	3,230,549,084	3,415,910,559	2,908,319,823	3,096,246,795	
Trade and other payables	6, 18	3,732,364,714	3,107,027,194	4,203,363,259	4,145,228,861	
Contract liabilities	8	529,182,585	665,845,150	-	-	
Current portion of lease liabilities	20	101,790,845	107,742,260	22,698,052	25,237,609	
Short-term loans from related parties	6	110,967,305	-	100,000,000	80,000,000	
Income tax payable		520,014,837	115,019,489	449,766,495	69,711,225	
Derivative - commodity forward contracts	32	197,697	234,032,207	197,697	234,032,207	
Other current liabilities		<u>301,216,371</u>	<u>254,511,284</u>	<u>41,884,314</u>	<u>17,964,912</u>	
Total current liabilities		<u>8,526,283,438</u>	<u>7,900,088,143</u>	<u>7,726,229,640</u>	<u>7,668,421,609</u>	
Non-current liabilities						
Long-term loan from related parties	6	-	7,718,529	-	-	
Lease liabilities - net of current portion	20	322,204,162	315,896,929	68,771,087	79,764,486	
Deferred tax liabilities	25	369,714,692	393,033,973	-	-	
Provision for long-term employee benefits	21	<u>246,786,202</u>	<u>246,882,196</u>	<u>135,103,822</u>	<u>145,856,344</u>	
Total non-current liabilities		<u>938,705,056</u>	<u>963,531,627</u>	<u>203,874,909</u>	<u>225,620,830</u>	
Total liabilities		<u>9,464,988,494</u>	<u>8,863,619,770</u>	<u>7,930,104,549</u>	<u>7,894,042,439</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 2022**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Shareholders' equity					
Share capital					
Registered					
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
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 interests 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	22	172,123,329	172,123,329	172,123,329	172,123,329
Unappropriated		14,003,178,416	13,285,766,211	9,082,474,145	7,995,603,112
Other components of shareholders' equity		(284,026,930)	(431,366,985)	123,644,359	(27,608,198)
Equity attributable to owners of the Company		16,232,705,259	15,367,952,999	12,283,745,324	11,045,621,734
Non-controlling interests of the subsidiaries		559,489,184	569,329,257	-	-
Total shareholders' equity		16,792,194,443	15,937,282,256	12,283,745,324	11,045,621,734
Total liabilities and shareholders' equity		26,257,182,937	24,800,902,026	20,213,849,873	18,939,664,173

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

Directors

**Tipco Asphalt Public Company Limited and its subsidiaries****Statement of comprehensive income****For the year ended 31 December 2022**

(Unit: Baht)

	<u>Note</u>	<u>Consolidated financial statements</u>		<u>Separate financial statements</u>		
		<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	
Profit or loss:						
Revenues						
Sales and service income	30,024,760,275	24,447,114,947	25,944,953,712	21,429,750,278		
Revenues from construction contracts	3,375,779,293	2,605,664,633	-	-		
Other income						
Dividend income from subsidiaries	11	-	-	465,329,556	187,480,548	
Dividend income from associate	13	-	-	119,591,865	85,505,033	
Gain on exchange		107,662,484	90,286,944	110,615,489	4,538,177	
Others		214,195,832	133,595,246	173,741,646	141,858,267	
Total revenues		<u>33,722,397,884</u>	<u>27,276,661,770</u>	<u>26,814,232,268</u>	<u>21,849,132,303</u>	
Expenses						
Cost of sales and services		25,129,895,827	19,723,431,299	22,089,570,743	18,032,740,798	
Loss from commodity forward contracts	32	679,755,777	1,048,417,215	679,755,777	1,048,417,215	
Reduction of cost of inventories to net realisable value (reversal)	9	197,582	(3,885,676)	1,886,953	10,969	
		25,809,849,186	20,767,962,838	22,771,213,473	19,081,168,982	
Cost of construction		3,229,323,111	2,403,260,487	-	-	
Selling expenses		160,339,649	169,822,267	96,079,106	95,113,197	
Administrative expenses		1,153,911,525	1,184,005,519	632,135,036	729,399,504	
Other expenses						
Reversal of impairment loss of investment in a subsidiary	11	-	-	(60,775,864)	-	
Impairment loss on property, plant and equipment	15	199,941,927	37,972,693	3,822,552	-	
Insurance claim from a fire	23	-	(270,647,162)	-	-	
Total expenses		<u>30,553,365,398</u>	<u>24,292,376,642</u>	<u>23,442,474,303</u>	<u>19,905,681,683</u>	
Profit from operating activities						
Share of profit (loss) from investments in joint ventures	12	9,094,506	(1,221,883)	-	-	
Share of profit from investments in associates	13	151,933,984	129,648,604	-	-	
Finance income		23,658,248	23,490,250	25,111,202	28,656,733	
Finance cost		(113,215,419)	(118,121,817)	(69,405,491)	(88,703,292)	
Expected credit losses	7	(120,240,367)	(33,454,061)	(20,911,166)	(14,251,699)	
Remeasurement gain on business combination		-	20,748,366	-	-	
Profit before income tax		<u>3,120,263,438</u>	<u>3,005,374,587</u>	<u>3,306,552,510</u>	<u>1,869,152,362</u>	
Income tax	25	(737,552,345)	(753,416,563)	(573,009,036)	(315,570,600)	
Profit for the year		<u>2,382,711,093</u>	<u>2,251,958,024</u>	<u>2,733,543,474</u>	<u>1,553,581,762</u>	

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 2022**

(Unit: Baht)

	<u>Note</u>	Consolidated financial statements		Separate financial statements		
		<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	
Other comprehensive income:						
<i>Other comprehensive income to be reclassified</i>						
<i>to profit or loss in subsequent periods:</i>						
Exchange differences on translation of financial statements in foreign currencies		(19,833,565)	744,119,888	-	-	
Gain on cash flow hedges - net of income tax	25, 32	151,252,557	62,523,768	151,252,557	62,523,768	
Other comprehensive income to be reclassified to profit or loss in subsequent periods - net of income tax		131,418,992	806,643,656	151,252,557	62,523,768	
<i>Other comprehensive income not to be reclassified</i>						
<i>to profit or loss in subsequent periods:</i>						
Actuarial gain (loss) - net of income tax	21, 25	3,728,424	(34,222,353)	10,383,370	(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		-	1,267,000	-	-	
Other comprehensive income not to be reclassified to profit or loss in subsequent periods - net of income tax		3,728,424	(35,303,353)	10,383,370	(27,422,621)	
Other comprehensive income for the year		<u>135,147,416</u>	<u>771,340,303</u>	<u>161,635,927</u>	<u>35,101,147</u>	
Total comprehensive income for the year		<u>2,517,858,509</u>	<u>3,023,298,327</u>	<u>2,895,179,401</u>	<u>1,588,682,909</u>	
Profit attributable to:						
Equity holders of the Company		2,366,511,142	2,219,712,251	<u>2,733,543,474</u>	<u>1,553,581,762</u>	
Non-controlling interests of the subsidiaries		16,199,951	32,245,773			
		<u>2,382,711,093</u>	<u>2,251,958,024</u>			
Total comprehensive income attributable to:						
Equity holders of the Company		2,521,808,071	2,976,957,658	<u>2,895,179,401</u>	<u>1,588,682,909</u>	
Non-controlling interests of the subsidiaries		(3,949,562)	46,340,669			
		<u>2,517,858,509</u>	<u>3,023,298,327</u>			
Earnings per share	28					
Basic earnings per share						
Profit attributable to equity holders of the Company		<u>1.50</u>	<u>1.41</u>	<u>1.73</u>	<u>0.98</u>	

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

Tipco Asphalt Public Company Limited and its subsidiaries**Notes to consolidated financial statements****For the year ended 31 December 2022****1. General information**

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.

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 Tipco Asphalt Public Company Limited ("the Company") and the following subsidiary companies ("the subsidiaries") (collectively as "the Group"):

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		<u>2022</u> (Million Baht)	<u>2021</u> (Million Baht)	<u>2021</u> (%)	<u>2021</u> (%)
<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
Ravana 1020 Co., Ltd.	Distribution of machine, materials and tools relating to road construction	80	80	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
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	497	497	62.50	62.50
Thanomwongse Service Co., Ltd. (100% owned by Thai Slurry Seal)	Construction service and sales of construction materials	2,500	2,500	62.50	62.50

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2022	2021	2022 (%)	2021 (%)
<u>Subsidiaries incorporated in Malaysia</u>					
Kemaman Oil Corporation Sdn Bhd ("KOC")	Holding company, manufacture, storer, tank rental 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, refinery, storer 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>					
Highway Resources Pte. Ltd. ("HRL")	Holding company	4.78 Million SGD	4.78 Million SGD	100.00	100.00
Highway Resources Trading Pte. Ltd. (100% owned by HRL)	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
Reta Link Pte. Ltd.	Marine transportation	0.05 Million SGD	0.05 Million SGD	100.00	100.00
Pacific Bitumen Shipping Pte. Ltd.	Marine transportation	0.04 Million USD	0.04 Million USD	100.00	100.00

Company's name	Nature of business	Shareholding percentage			
		2022	2021	2022 (%)	2021 (%)
<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 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

Company's name	Nature of business	Paid-up capital		Shareholding percentage	
		2022	2021	2022 (%)	2021 (%)
<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
<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. ("Zhenjiang")*	Manufacture and distribution of asphalt products	-	20.00 Million RMB	-	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

*During the current year, the Group sold all of its investment in Zhenjiang as described in Note 11 to the consolidated financial statements.

- 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 subsidiaries 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 of subsidiaries 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	
			<u>2022</u>	<u>2021</u>
TN Joint Venture	Construction service	Thailand	51.61	51.61
TN-CEI Joint Venture	Construction service	Thailand	51.00	51.00
TH Joint Venture	Construction service	Thailand	51.00	51.00
NTH Joint Venture	Construction service	Thailand	23.50	23.50
NT Joint Venture	Construction service	Thailand	49.00	-

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 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 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 will become effective for fiscal years beginning on or after 1 January 2023

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 2023. 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 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 and expense 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 in subsidiaries, joint ventures and associates

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 of the investment properties 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	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
Office equipment	4 to 5 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 and 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.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

4.19 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:

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.

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.

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.

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.

6. 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>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	
<u>Transactions with subsidiaries</u>					
(eliminated from the consolidated financial statements)					
Sales and service income	-	-	7,599	6,162	Cost plus certain margin
Rental and service income	-	-	7	8	Contract price
Technical and administrative assistance income	-	-	55	61	Contract price
Interest income	-	-	25	28	At rates of 2.00 percent and LIBOR plus 1.50 percent per annum
Dividend income	-	-	465	187	
Purchases of goods	-	-	11	10	Cost plus certain margin
Rental and service expenses	-	-	1,996	2,112	Contract price
<u>Transactions with joint arrangements</u>					
Sales and service income	1,112	727	614	724	Market price / contract price
Revenues from construction contracts	161	102	-	-	Contract price
Rental and service income	5	1	-	-	Contract price
Interest income	1	1	-	-	At rate of 3.20 percent per annum
Purchases of goods	272	-	272	-	Market price
<u>Transactions with group of other joint operators</u>					
Purchases of goods	106	19	-	-	Market price / contract price
Cost of construction	223	197	-	-	Contract price
Rental and service expenses	-	2	-	-	Contract price
Interest expenses	3	-	-	-	At rates of 5.25 - 5.75 percent per annum

(Unit: Million Baht)

	Consolidated		Separate		Transfer Pricing Policy	
	financial statements		financial statements			
	2022	2021	2022	2021		
<u>Transactions with associates</u>						
Sales and service income	-	13	-	12	Market price / contract price	
Dividend income	-	-	120	86		
Rental and service expense	3	3	-	-	Contract price	
<u>Transactions with related companies</u>						
Sales and service income	2,479	2,021	2,405	2,021	Market price / contract price	
Rental and service income	4	4	3	3	Contract price	
Rental and service expenses	94	91	65	68	Contract price	
Technical and administrative assistance expenses	44	42	27	29	Contract price	

The balances of the accounts between the Group and those related companies as at 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Trade and other receivables- related parties</u> (Note 7)				
Subsidiaries	-	-	1,536,022	1,106,588
Joint arrangements	287,837	230,700	172,807	65,816
Associates	4,266	5,727	-	-
Related companies (common shareholders and directors)	421,053	203,755	401,875	202,572
Total trade and other receivables - related parties	713,156	440,182	2,110,704	1,374,976
Less: Allowance for expected credit losses	-	-	-	(248,959)
Total trade and other receivables - related parties, net	713,156	440,182	2,110,704	1,126,017

Unbilled receivables - related parties

Joint arrangements	28,164	13,642	-	-
Total unbilled receivables - related parties	28,164	13,642	-	-

Advance payments for inventories and services - related parties

Group of other joint operators	138,997	153,424	-	-
Total advance payments for inventories and services - related parties	138,997	153,424	-	-

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
<u>Trade and other payables - related parties</u> (Note 18)				
Subsidiaries	-	-	2,227,046	2,317,203
Joint arrangements	90,818	-	80,145	-
Group of other joint operators	227,584	143,736	-	-
Related companies (common shareholders and directors)	83,474	93,778	60,754	63,542
Total trade and other payables - related parties	401,876	237,514	2,367,945	2,380,745

Advance received from customer - related parties

Joint arrangements	19,890	39,402	-	-
Total advance received from customer - related parties	19,890	39,402	-	-

Loans to related parties and loan from related parties

The balances and the movements of loans between the Company and those related companies are as follows:

(Unit: Thousand Baht)					
Consolidated financial statements					
Company's name	Related by	Balance as at 31 December 2021	Increase during the year	Decrease during the year	Balance as at 31 December 2022
<u>Short-term loans to related party</u>					
TN Joint Venture	Joint arrangements	25,226	92,734	(77,032)	40,928
<u>Short-term loans from related party</u>					
Nawarat Patanakarn PCL	Other joint operator	-	110,967	-	110,967
<u>Long-term loan from related party</u>					
Zhenjiang Highway Materials	Shareholder of Company	7,719	-	(7,719)	-



(Unit: Thousand Baht)

Separate financial statements						
		Balance as at 31 December	Increase during the year	Decrease during the year	Gain on exchange	Balance as at 31 December
Company's name	Related by	2021				2022
<u>Short-term loan to related party</u>						
Alpha Maritime Co., Ltd.	Subsidiary	110,000	-	-	-	110,000
<u>Long-term loans to related parties</u>						
AD Shipping Pte. Ltd.	Subsidiary	38,620	-	-	1,330	39,950
Pacific Bitumen Shipping Pte. Ltd.*	Subsidiary	636,624	-	(178,004)	15,786	474,406
Total		675,244	-	(178,004)	17,116	514,356

* Pacific Bitumen Shipping Pte. Ltd. offset its long-term loan to be repaid to the Company with outstanding balance receivable from the Company.

Short-term loans from related parties

Raycol Asphalt Co., Ltd.	Subsidiary	60,000	100,000	(60,000)	-	100,000
Thai Bitumen Co., Ltd.	Subsidiary	20,000	-	(20,000)	-	-
Total		80,000	100,000	(80,000)	-	100,000

Directors and management's benefits

During the years ended 31 December 2022 and 2021, the Group had employee benefit expenses payable to their directors and management as below.

	(Unit: Million Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Short-term employee benefits	211	185	195	166
Post-employment benefits and other long-term benefits	6	3	6	3
Total	217	188	201	169

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.

7. Trade and other receivables

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
<u>Trade receivables - related parties</u> (Note 6)				
Aged on the basis of due dates				
Not yet due	623,849	407,677	1,670,949	708,590
Past due				
Up to 3 months	49,581	-	197,884	60,869
3 - 6 months	2,743	-	93,504	47,835
6 - 9 months	-	-	1,577	18,124
9 - 12 months	2,902	128	1,609	7,385
Over 12 months	-	-	163	252,027
Total	679,075	407,805	1,965,686	1,094,830
Less: Allowance for expected credit losses	-	-	-	(248,959)
Total trade receivables - related parties, net	<u>679,075</u>	<u>407,805</u>	<u>1,965,686</u>	<u>845,871</u>
<u>Trade receivables - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	4,515,929	2,609,909	2,826,620	1,203,480
Past due				
Up to 3 months	787,090	532,571	279,271	205,597
3 - 6 months	516,520	301,376	171,518	126,051
6 - 9 months	235,559	126,813	153,784	39,049
9 - 12 months	125,278	40,979	55,670	3,633
Over 12 months	409,037	434,481	111,751	84,381
Total	6,589,413	4,046,129	3,598,614	1,662,191
Less: Allowance for expected credit losses	(436,080)	(453,589)	(166,439)	(97,653)
Total trade receivables - unrelated parties, net	<u>6,153,333</u>	<u>3,592,540</u>	<u>3,432,175</u>	<u>1,564,538</u>
Total trade receivables - net	<u>6,832,408</u>	<u>4,000,345</u>	<u>5,397,861</u>	<u>2,410,409</u>
<u>Other receivables</u>				
Accounts receivable from commodity forward contracts	100,271	194,161	100,271	194,161
Other receivables - related parties (Note 6)	34,081	32,377	145,018	280,146
Other receivables - unrelated parties	21,454	9,835	1,069	1,383
Total other receivables	<u>155,806</u>	<u>236,373</u>	<u>246,358</u>	<u>475,690</u>
Total trade and other receivables - net	<u>6,988,214</u>	<u>4,236,718</u>	<u>5,644,219</u>	<u>2,886,099</u>

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		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Beginning balance	453,589	388,248	346,612	301,708
Allowance for expected credit losses	200,724	33,454	71,095	14,252
Amount recovered	(80,484)	-	(50,184)	-
Amount written-off	(370)	-	(197,477)	-
Disposal of investment in subsidiary	(122,543)	-	-	-
Effect from foreign exchange	(14,836)	31,887	(3,607)	30,652
Ending balance	<u>436,080</u>	<u>453,589</u>	<u>166,439</u>	<u>346,612</u>

8. Contract assets/Contract liabilities

8.1 Contract balances

(Unit: Thousand Baht)

	Consolidated financial statements	
	<u>2022</u>	<u>2021</u>
Contract assets		
Unbilled receivables	958,140	722,923
Retention receivables	<u>187,988</u>	<u>149,938</u>
Total contract assets	<u>1,146,128</u>	<u>872,861</u>
Contract liabilities		
Advances received from customers	529,183	665,845
Total contract liabilities	<u>529,183</u>	<u>665,845</u>

8.2 Unbilled receivables

As at 31 December 2022, the balance of unbilled receivables of Baht 958 million was expected to be billed within one year (2021: Baht 723 million).

8.3 Revenue recognised in relation to contract balances

During the year 2022, the Group recognised contract liabilities at the beginning of the year of Baht 280 million (2021: Baht 245 million) as revenue, and recognised decrease in revenue from changes in variable considerations of performance obligations satisfied in previous years of Baht 65 million (2021: Baht 45 million).

8.4 Revenue to be recognised for the remaining performance obligations

As at 31 December 2022, the Group expected to recognise revenue totaling Baht 5,736 million (2021: Baht 7,367 million) 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	
	2022	2021	2022	2021	2022	2021
Finished goods	1,908,430	1,889,151	(1,814)	(1,011)	1,906,616	1,888,140
Raw materials	2,732,468	4,207,962	(2,508)	(9,128)	2,729,960	4,198,834
Packaging materials, spare parts and factory supplies	171,207	145,131	(133)	(726)	171,074	144,405
Goods in transit	175,269	139,174	-	-	175,269	139,174
Total	<u>4,987,374</u>	<u>6,381,418</u>	<u>(4,455)</u>	<u>(10,865)</u>	<u>4,982,919</u>	<u>6,370,553</u>

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduction of cost to net realisable value		Inventories - net	
	2022	2021	2022	2021	2022	2021
Finished goods	1,465,738	1,374,365	(1,814)	(513)	1,463,924	1,373,852
Raw materials	2,279,982	3,768,037	-	-	2,279,982	3,768,037
Packaging materials, spare parts and factory supplies	8,725	9,322	(133)	-	8,592	9,322
Goods in transit	21,835	22,302	-	-	21,835	22,302
Total	<u>3,776,280</u>	<u>5,174,026</u>	<u>(1,947)</u>	<u>(513)</u>	<u>3,774,333</u>	<u>5,173,513</u>

During the current year, the Group reduced cost of inventories by Baht 0.2 million which was included in cost of sales to reflect the net realisable value. (2021: reversed by Baht 3.9 million) (the Company only: reduced of Baht 1.9 million, 2021: Baht 0.01 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.

During the current year, the subsidiary received payment for the sales of such assets after having the ownership transferred to the buyer.

11. Investments in subsidiaries

Details of investments in subsidiaries as presented in the separate financial statements.

Company's name	Investment cost		Dividend received during the year	
	2022	2021	2022	2021
<u>Domestic subsidiaries</u>				
Raycol Asphalt Co., Ltd.	583,030	583,030	-	66,600
Thai Bitumen Co., Ltd.	386,696	386,696	-	112,500
Less: Allowance for impairment loss of investment	-	(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.	79,999	79,999	-	-
Tasco Shipping Co., Ltd.	289,999	289,999	-	-
Thai Slurry Seal Co., Ltd.	598,043	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	801	-
Tipco Asphalt (Cambodia) Co., Ltd.	3,352	3,352	-	-
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	35,978	8,381
AD Shipping Pte. Ltd.	430,232	430,232	-	-
Reta Link Pte. Ltd.	28,682	28,682	428,551	-
Tipco Asphalt Lao Company Limited	78,877	78,877	-	-
Total investments in subsidiaries	8,376,058	8,315,283	465,330	187,481

The paid-up capital and percentage of shareholding were presented in Note 2.2 to the consolidated financial statements.

Disposal of investment in Zhenjiang Tipco Asphalt Co., Ltd. ("Zhenjiang")

In May 2022, the Group sold all of its investment in Zhenjiang to another shareholder. This resulted in gain on disposal of investment in a subsidiary amounting to Baht 35 million, which was included in other income in the consolidated statements of comprehensive income.

Holding in Zhenjiang was an investment in a subsidiary by an overseas subsidiary, representing 51 percent interest in the subsidiary. The Group did not include the financial statements of Zhenjiang in the consolidated financial statements as from the date of investment disposal.

Reversal of impairment loss of investment in Thai Bitumen Co., Ltd. ("Thai Bitumen")

During 2022, having noted the continuously good operating results, the Company's management revisits the recoverable amount of the investment in Thai Bitumen and reaches the conclusion to reverse the allowance for impairment loss of the investment amounting to Baht 61 million. The amount is presented as a separate item in profit or loss of the separate financial statements.

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:

Joint ventures	Nature of business	Consolidated financial statements					
		Shareholding		Cost		Carrying amounts	
		percentage		2022	2021	2022	2021
		(%)	(%)				
Asia Bitumen Trading Pte. Ltd. (Owned by TIHK)	Distribution of asphalt and petroleum products	50	50	242	242	44,888	39,712
Bomeo Asphalt Sdn Bhd (Owned by KBC)	Distribution of asphalt products	50	50	23,815	23,815	8,444	13,261
Phoenix Asphalt Philippines Inc.	Manufacture and distribution of asphalt and petroleum products	40	40	67,553	67,553	81,984	79,595
Total				91,610	91,610	135,316	132,568

(Unit: Thousand Baht)

Joint venture	Nature of business	Separate financial statements					
		Shareholding percentage		Cost		Carrying amounts based on cost method	
		2022 (%)	2021 (%)	2022	2021	2022	2021
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:

Joint ventures	Consolidated financial statements	
	Share of profit (loss) from investments in joint ventures during the year	
	2022	2021
Asia Bitumen Trading Pte. Ltd.	4,206	(5,366)
Borneo Asphalt Sdn Bhd	(2,240)	(954)
Phoenix Asphalt Philippines Inc.	7,129	5,098
Total	9,095	(1,222)

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 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	2022	2021
Cash and cash equivalents	42.9	100.1
Trade and other receivables	86.8	-
Other assets	1.1	2.4
Trade and other payables	(32.5)	(13.2)
Other liabilities	(8.6)	(9.9)
Net assets	89.7	79.4
Shareholding percentage (%)	50	50
Carrying amounts of joint venture based on equity method	44.9	39.7

Summarised information about profit and loss for the years ended 31 December 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Total revenues	1,917.4	1,187.0
Cost of goods sold	(1,883.9)	(1,171.6)
Total expenses	(25.1)	(26.2)
Profit (loss) for the year	8.4	(10.8)

Financial information of Borneo Asphalt Sdn Bhd

Summarised information about financial position as at 31 December 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Cash and cash equivalents	30.5	41.1
Trade and other receivables	26.3	38.5
Other assets	402.0	407.3
Trade and other payables	(118.7)	(17.1)
Other liabilities	(323.3)	(443.2)
Net assets	16.8	26.6
Shareholding percentage (%)	50	50
Carrying amounts of joint venture based on equity method	8.4	13.3

Summarised information about profit and loss for the years ended 31 December 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Total revenues	388.2	325.5
Cost of goods sold	(371.1)	(310.5)
Total expenses	(21.5)	(16.9)
Loss for the year	(4.4)	(1.9)

Financial information of Phoenix Asphalt Philippines Inc.

Summarised information about financial position as at 31 December 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Cash and cash equivalents	77.0	15.0
Trade and other receivables	32.9	28.4
Other assets	224.7	195.4
Trade and other payables	(13.5)	(13.6)
Other liabilities	<u>(116.2)</u>	<u>(26.2)</u>
Net assets	204.9	199.0
Shareholding percentage (%)	40	40
Carrying amounts of joint venture based on equity method	82.0	79.6

Summarised information about profit and loss for the years ended 31 December 2022 and 2021 is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Total revenues	694.4	447.3
Cost of goods sold	(636.9)	(403.0)
Total expenses	<u>(39.7)</u>	<u>(31.6)</u>
Profit for the year	17.8	12.7

13. Investments in associates

13.1 Details of associates

(Unit: Thousand Baht)

Consolidated financial statements							
Company's name	Nature of business	Shareholding				Carrying amounts	
		percentage		Cost		based on	
		2022	2021	2022	2021	2022	2021
		(%)	(%)				
Colasie Co., Ltd.	Holding company	40	40	18,404	18,404	507,202	479,188
PT Sarana Distribusi							
Aspal Nusantara							
(Owned by ABS)	Barge rental service	49	49	1,313	1,313	44	2
Total investments in associates				19,717	19,717	507,246	479,190

(Unit: Thousand Baht)

Separate financial statements							
Company's name	Nature of business	Shareholding				Carrying amounts	
		percentage		Cost		based on	
		2022	2021	2022	2021	2022	2021
		(%)	(%)				
Colasie Co., Ltd.	Holding company	40	40	18,404	18,404	18,404	18,404
Total investments in associates				18,404	18,404	18,404	18,404

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:

Company's name	Consolidated financial statements				Separate financial statements	
	Share of other comprehensive income from investments in associates during the year		Dividend received during the year by the Company			
	2022	2021	2022	2021	2022	2021
Colasie Co., Ltd.	151,837	130,365	-	-	119,592	85,505
PT Sarana Distribusi						
Aspal Nusantara	97	(131)	-	-	-	-
Thai Slurry Seal Co., Ltd.	-	(585)	-	(2,348)	-	-
Total	<u>151,934</u>	<u>129,649</u>	<u>-</u>	<u>(2,348)</u>	<u>119,592</u>	<u>85,505</u>

13.3 Summarised financial information about material associates

Financial information of Colasie Co., Ltd.

Financial information of Colasie Co., Ltd. as at 31 December 2022 and 2021 and for the years then ended are summarised below.

	(Unit: Million Euro)	
	2022	2021
Paid-up capital	1.04	1.04
Total assets	1.47	4.75
Total liabilities	0.01	0.03
Total revenues	5.08	5.87
Profit for the year	5.02	5.79

14. Investment properties

(Unit: Thousand Baht)

Consolidated financial statements

	The Company's land, buildings and equipment located at Petchburi plant	Land of Thai Bitumen	Total
As at 31 December 2022:			
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	42,800	146,233	189,033

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	42,800	146,233	189,033

(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 2022:			
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	42,800	51,542	94,342

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	42,800	51,542	94,342

The fair values of the investment properties, appraised by an independent professional valuer using the Sales Comparison Approach, as at 31 December 2022 and 2021 are stated below:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
The Company's land for rent located at				
Suratthani province	-	-	218,000	218,000
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

(Unit: Thousand Baht)

	Consolidated financial statements						
Cost	Buildings, building improvements and land complements improvement	Machinery, tools and equipment	Furniture, office and equipment and vehicles	Vessels	Installation	Total	Construction in progress and equipment under construction
As at 1 January 2021	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	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
Additions	7,049	9,376	95,587	16,555	91,831	163,592	383,990
Disposals/written off	(198)	(37,628)	(85,933)	(145,643)	(124,942)	(34)	(394,378)
Transfer in (transfer out)	410	10,861	329,260	8,556	-	(349,087)	-
Disposal of investment in a subsidiary	-	(63,526)	(16,880)	(3,019)	-	-	(83,425)
As at 31 December 2022	704,260	985,735	8,757,516	1,166,801	3,997,085	276,050	15,887,447

(Unit: Thousand Baht)

	Consolidated financial statements						
	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 2021	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 (Note 10)	-	-	(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
Depreciation for the year	10,877	34,621	509,763	126,887	212,688	-	894,836
Accumulated depreciation on disposals/written off	(127)	(37,195)	(40,507)	(135,318)	(119,591)	-	(332,738)
Disposal of investment in a subsidiary	-	(16,330)	(5,202)	(510)	-	-	(22,042)
As at 31 December 2022	340,259	556,576	4,901,042	776,831	1,514,659	-	8,089,367
Allowance for impairment loss							
As at 1 January 2021	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 (Note 10)	-	-	-	-	(36,152)	-	(36,152)
As at 31 December 2021	1,183	50,769	34,064	2,066	-	5,049	93,131
Increase during the year	-	-	-	-	196,119	3,823	199,942
Decrease during the year	-	(50,769)	(34,064)	(2,066)	-	(5,049)	(91,948)
As at 31 December 2022	1,183	-	-	-	196,119	3,823	201,125

(Unit: Thousand Baht)

	Consolidated financial statements						
	Buildings, building improvements and land and land complements improvement	Machinery, tools and equipment	Furniture, office equipment and Vehicles	Vessels	Installation	Total	Construction in progress and equipment under construction
Translation adjustments							
As at 1 January 2021	-	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	(4,591)	544,221
As at 31 December 2021	-	21,723	(24,816)	(16,825)	(40,077)	(28,626)	(88,621)
Translation adjustments during the year	-	(15,155)	39,977	(1,998)	41,082	14,596	78,502
As at 31 December 2022	-	6,568	15,161	(18,823)	1,005	(14,030)	(10,119)
Net book value							
As at 31 December 2021	366,307	462,126	3,939,614	485,689	2,568,557	427,904	8,250,197
As at 31 December 2022	362,818	435,727	3,871,635	371,147	2,287,312	258,197	7,586,836
Depreciation for the year							
2021 (Baht 760 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)						942,515	
2022 (Baht 820 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)						894,836	

In 2022, the Group recognised an impairment loss for a vessel amounting to Baht 196 million and presented it under the caption of impairment loss on property, plant and equipment in the consolidated statement of comprehensive income, to reduce the carrying amount of the asset to its recoverable amount. The Group's management determined the recoverable amount based on value in use, using cash flow projections based on financial estimates of remaining useful live of the vessel and discounted to present value. The fair value hierarchy level was classified as level 3.

(Unit: Thousand Baht)

	Separate financial statements					
	Buildings, building improvements and land improvement	Land and land improvement	Machinery, tools and equipment	Furniture, office equipment and vehicles	Construction in progress and equipment under installation	Total
Cost						
As at 1 January 2021	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
Additions	4,054	2,786	7,483	2,227	7,440	23,990
Disposals/written off	(198)	(609)	(21,303)	(109,097)	-	(131,207)
Transfer in (transfer out)	51	177	5,359	-	(5,587)	-
As at 31 December 2022	515,046	387,155	734,318	536,330	12,362	2,185,211
Accumulated depreciation						
As at 1 January 2021	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
Depreciation for the year	4,395	11,296	44,901	53,043	-	113,635
Accumulated depreciation on disposal/written off	(127)	(224)	(15,013)	(102,765)	-	(118,129)
As at 31 December 2022	263,004	226,296	555,294	389,645	-	1,434,239

(Unit: Thousand Baht)

	Separate financial statements					
	Buildings, building improvements	Land and land improvement	Machinery, tools and equipment	Furniture, office equipment and vehicles	Construction in progress and equipment under installation	Total
Allowance for impairment loss						
As at 31 December 2021	1,183	-	6,273	-	-	7,456
Increase during the year	-	-	-	-	3,823	3,823
Decrease during the year	-	-	(6,273)	-	-	(6,273)
As at 31 December 2022	1,183	-	-	-	3,823	5,006
Net book value						
As at 31 December 2021	251,220	169,577	211,100	203,833	10,509	846,239
As at 31 December 2022	250,859	160,859	179,024	146,685	8,539	745,966
Depreciation for the year						
2021 (Baht 108 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)					132,422	
2022 (Baht 93 million included in manufacturing cost, and the balance in selling expenses and administrative expenses)					13,635	

As at 31 December 2022, 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 3,387 million (2021: Baht 3,061 million) (The Company only: Baht 1,011 million (2021: Baht 1,165 million)).



16. Intangible assets

(Unit: Thousand Baht)

Consolidated financial statements							Separate financial statements		
Computer software	Customer relationship	Non-competition clause	Backlog	Installation	Total	Computer software	Computer under installation	Total	
As at 31 December 2022:									
Cost	212,057	224,112	11,724	129,386	5,659	582,938	165,698	5,659	
<u>Less</u> Accumulated amortisation	(190,023)	(108,290)	(10,725)	(83,894)	-	(392,932)	(151,643)	-	
Translation adjustments	2,099	-	(999)	-	-	1,100	-	-	
Net book value	<u>24,133</u>	<u>115,822</u>	<u>-</u>	<u>45,492</u>	<u>5,659</u>	<u>191,106</u>	<u>14,055</u>	<u>5,659</u>	
As at 31 December 2021:									
Cost	208,925	224,112	11,724	129,386	887	575,034	164,143	887	
<u>Less</u> Accumulated amortisation	(167,984)	(90,929)	(10,725)	(40,123)	-	(309,761)	(132,825)	-	
Translation adjustments	2,110	-	(999)	-	-	1,111	-	-	
Net book value	<u>43,051</u>	<u>133,183</u>	<u>-</u>	<u>89,263</u>	<u>887</u>	<u>266,384</u>	<u>31,318</u>	<u>887</u>	

A reconciliation of the net book value of intangible assets for the years 2022 and 2021 is presented below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Net book value at beginning of year	266,384	158,360	32,205	50,104
Acquisition of computer software	7,902	10,975	6,327	6,225
Increase from business combination	-	181,458	-	-
Disposal of investment in a subsidiary	(62)	-	-	-
Amortisation	(83,171)	(84,744)	(18,818)	(24,124)
Translation adjustments	53	335	-	-
Net book value at end of year	<u>191,106</u>	<u>266,384</u>	<u>19,714</u>	<u>32,205</u>

17. Short-term loans from financial institutions

	(Unit: Thousand Baht)					
	Interest rates		Consolidated		Separate	
	(% per annum)		financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Loans in Thai Baht	1.45 - 2.75	1.25 - 2.35	3,037,905	3,188,381	2,908,320	3,096,247
Loan in Renminbi	-	4.00	-	21,003	-	-
Loans in Indonesia Rupiah	6.40 - 7.90	6.40 - 6.55	<u>192,644</u>	<u>206,527</u>	-	-
Total			<u>3,230,549</u>	<u>3,415,911</u>	<u>2,908,320</u>	<u>3,096,247</u>

18. Trade and other payables

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Trade payables - related parties (Note 6)	175,296	17,146	2,306,060	2,315,802
Trade payables - unrelated parties	2,408,645	2,045,354	1,536,774	1,515,174
Accounts payable from commodity forward contracts	53,000	-	53,000	-
Unbilled payables - related parties (Note 6)	131,549	127,264	-	-
Retention payables - unrelated parties	60,440	44,905	1,774	5,726
Other payables - related parties (Note 6)	95,031	93,104	61,885	64,943
Other payables and accrued expenses - unrelated parties	<u>808,404</u>	<u>779,254</u>	<u>243,870</u>	<u>243,584</u>
Total trade and other payables	<u>3,732,365</u>	<u>3,107,027</u>	<u>4,203,363</u>	<u>4,145,229</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 prohibition from creating lien over assets of the Group.
- c) Financial support letters provided by the Group to banks.
- d) 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 2022 and 2021 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements				
	Land and buildings	Machinery and equipment	Office		
			equipment	Motor vehicles	Total
1 January 2021	461,307	53,373	-	44,540	559,220
Additions	84,068	60,352	-	34,292	178,712
Increase from business combination	20,006	31,508	1,520	22,412	75,446
Depreciation	(64,619)	(16,454)	(522)	(26,636)	(108,231)
Written off	(11,179)	-	-	-	(11,179)
Translation adjustments	39,915	(5,233)	-	-	34,682
31 December 2021	529,498	123,546	998	74,608	728,650
Additions	31,431	57,846	6,719	19,324	115,320
Lease modification	6,523	-	-	-	6,523
Depreciation	(59,164)	(27,105)	(1,096)	(32,234)	(119,599)
Written off	(1,154)	-	-	(341)	(1,495)
Translation adjustments	5,440	4,717	-	-	10,157
31 December 2022	512,574	159,004	6,621	61,357	739,556

(Unit: Thousand Baht)

	Separate financial statements			
	Land and buildings	Office equipment	Motor vehicles	Total
1 January 2021	86,837	-	40,516	127,353
Additions	811	-	14,535	15,346
Depreciation	(14,206)	-	(15,180)	(29,386)
Written off	(10,564)	-	-	(10,564)
31 December 2021	62,878	-	39,871	102,749
Additions	-	6,719	9,865	16,584
Lease modification	(2,250)	-	-	(2,250)
Depreciation	(9,967)	(560)	(16,804)	(27,331)
31 December 2022	50,661	6,159	32,932	89,752

b) Lease liabilities

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Lease payments	512,247	504,126	97,883	113,359
Less: Deferred interest expenses	(88,252)	(80,487)	(6,414)	(8,357)
Total	423,995	423,639	91,469	105,002
Less: Portion due within one year	(101,791)	(107,742)	(22,698)	(25,238)
Lease liabilities - net of current portion	322,204	315,897	68,771	79,764

A maturity analysis of lease payments is disclosed in Note 32.2 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	
	2022	2021	2022	2021
Depreciation expense of right-of-use assets	119,599	108,231	27,331	29,386
Interest expense on lease liabilities	19,244	15,201	2,788	3,330
Expense relating to short-term leases	6,183	5,881	157	763
Expense relating to leases of low-value assets	9,632	5,762	4,487	4,521

d) Others

The Group has total cash outflows for leases for the year ended 31 December 2022 of Baht 143 million (2021: Baht 128 million) (the Company only: Baht 30 million, 2021: Baht 37 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 financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Provision for long-term employee benefits				
at beginning of year	246,882	166,386	145,856	114,115
Increase form business combination	-	40,576	-	-
Included in profit or loss:				
Defined benefit plans				
Current service cost	22,349	17,262	12,851	9,540
Past service cost	(263)	(11,725)	(99)	-
Interest cost	5,429	5,086	2,784	1,799
Long service award	4,869	8,407	703	4,003
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
Financial assumptions changes	(11,266)	(5,272)	(5,729)	(4,086)
Experience adjustments	6,508	48,026	(7,250)	38,365
Benefits paid during the year	(25,945)	(25,216)	(14,012)	(17,880)
Translation adjustments	(1,777)	3,352	-	-
Provision for long-term employee benefits				
at end of year	<u>246,786</u>	<u>246,882</u>	<u>135,104</u>	<u>145,856</u>

The Group expects to pay Baht 45 million of long-term employee benefits during the next year (2021: Baht 44 million) (the Company only: Baht 26 million, 2021: Baht 26 million).

As at 31 December 2022, the weighted average duration of the liabilities for long-term employee benefit was between 6 - 15 Years (2021: 3 - 19 years) (the Company only: 6 years, 2021: 3 years).

Key actuarial assumptions used for the valuation are as follows:

	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(% per annum)	(% per annum)	(% per annum)	(% per annum)
Discount rate	2.9 - 7.0	2.0 - 8.0	2.9	2.0
Future salary increase rate	4.0 - 7.0	3.0 - 7.0	4.0	3.0 - 4.0
Staff turnover rate (depending on age of employee)	0.0 - 25.0	0.0 - 25.0	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 2022 and 2021 are summarised below:

(Unit: Million Baht)				
31 December 2022				
	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)	14	(6)	7
Salary increase rate	12	(11)	6	(6)

(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)

22. 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.

23. Insurance claim from a fire

During 2021, the subsidiary received and recorded income of final payment pursuant to its insurance claim of MYR 34 million or approximately Baht 271 million.

24. Expenses by nature

Significant expenses by nature are as follows:

	(Unit: Million Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Salary, wages and other employee benefits	1,368	1,422	512	533
Depreciation and maintenance expenses	1,079	1,135	192	240
Costs related to production of goods and services (excluding of staff cost, depreciation and maintenance expenses)	26,812	20,477	21,914	17,826

25. Income tax

Income tax expenses for the years ended 31 December 2022 and 2021 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Current income tax:				
Current income tax charge	(727,684)	(419,382)	(531,753)	(260,051)
Adjustment in respect of income tax of previous year	(2,287)	(2,137)	(2,219)	-
Deferred tax:				
Relating to origination and reversal of temporary differences	<u>(7,581)</u>	<u>(331,898)</u>	<u>(39,037)</u>	<u>(55,520)</u>
Income tax expense reported in profit or loss	<u>(737,552)</u>	<u>(753,417)</u>	<u>(573,009)</u>	<u>(315,571)</u>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Deferred tax on actuarial gains and losses	1,054	(8,746)	2,596	(6,856)
Deferred tax on change in fair value of hedging instruments of cash flow hedges	<u>37,813</u>	<u>15,631</u>	<u>37,813</u>	<u>15,631</u>
	<u>38,867</u>	<u>6,885</u>	<u>40,409</u>	<u>8,775</u>

Reconciliation between income tax expenses and the product of accounting profit multiplied by the applicable tax rates for the years ended 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Accounting profit before tax	3,120,263	3,005,375	3,306,553	1,869,152
Income tax at Thai corporate income tax rate of 20%	(624,053)	(601,075)	(661,311)	(373,830)
Adjustment in respect of income tax of previous year	(2,287)	(2,137)	(2,219)	-
Utilisation of previously unrecognised tax losses and capital allowance	1,061	5,641	-	-
Unused tax loss and unutilised investment tax allowances of current year which has not recognised as deferred tax assets	(44,723)	(187,624)	-	-
Difference of tax rate in group companies	(4,455)	(7,262)	-	-
Adjustment of previous deferred tax assets/ liabilities	(40,921)	-	(40,189)	-
Effects of:				
Non-taxable income/expenses	(68,813)	(69,529)	10,729	(2,109)
Additional expenses deductions allowed	777	2,215	175	1,077
Exemption of income	6,277	30,771	116,984	54,597
Promotional privileges (Note 26)	6,579	9,082	-	-
Tax privilege (Note 27)	23,102	31,448	2,822	4,694
Share of profit from investment in joint ventures and associates	13,985	25,686	-	-
Others	(4,081)	9,367	-	-
Total	(22,174)	39,040	130,710	58,259
Income tax expenses reported in profit or loss	<u>(737,552)</u>	<u>(753,417)</u>	<u>(573,009)</u>	<u>(315,571)</u>

The tax rates enacted at the end of the reporting period of the Group are 0% to 25% (2021: 0% to 25%).

The components of deferred tax assets and deferred tax liabilities are as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statement	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Deferred tax assets				
Allowance for doubtful accounts	83,843	62,356	33,288	69,322
Reduction of cost of inventories to net realisable value	2,078	2,565	389	103
Fair value of commodity forward contracts	39	53,708	39	53,708
Allowance for asset impairment	65,863	65,099	18,378	17,614
Provision for long-term employee benefits	50,588	51,727	27,021	29,171
Effect on elimination of intercompany transaction	8,579	940	-	-
Unutilised tax loss and capital allowance	14,240	330,588	7,972	9,543
Others	<u>12,789</u>	<u>19,196</u>	<u>550</u>	<u>636</u>
Total	<u>238,019</u>	<u>586,179</u>	<u>87,637</u>	<u>180,097</u>
Deferred tax liabilities				
Difference depreciation for tax purpose	(321,728)	(644,716)	(28,457)	(26,764)
Fair value of commodity forward contracts	(25,752)	(44,563)	(25,752)	(44,562)
Fair value of forward exchange contracts	(4,403)	(309)	(4,403)	(300)
Share of profit from investment in a associate	(58,640)	-	-	-
Fair value adjustment of assets from business combination	<u>(89,955)</u>	<u>(112,601)</u>	<u>-</u>	<u>-</u>
Total	<u>(500,478)</u>	<u>(802,189)</u>	<u>(58,612)</u>	<u>(71,626)</u>

Presented as follows:

Deferred tax assets	107,256	177,024	29,025	108,471
Deferred tax liabilities	369,715	393,034	-	-

As at 31 December 2022 and 2021, the 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>2022</u> (Million)	<u>2021</u> (Million)
Baht	3	50
Malaysian Ringgit	95	98
Renminbi	-	33

26. 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.

Alpha Maritime Company Limited Bitumen Marine Company Limited

9 October 2014

29 October 2015

27. Tax privileges

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.

Tax privilege for an International Business Center (“IBC”)

The Company was granted approval from the Revenue Department to be an International Business Center, providing managerial or technical services, supporting services or to be an international trading center. Under this tax privilege, the corporate income tax rate of IBC activity is reduced for 15 accounting periods, from 1 June 2019 to 31 December 2033.

Tax privilege from the stipulated investment

Kemaman Bitumen Company Sdn Bhd were granted tax privilege for a corporate income tax reduction from the stipulated investment amount.

28. 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						
			Weighted average number			
	Profit for the year		of ordinary shares		Earnings per share	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share						
Profit attributable to equity holders of the Company	2,366,511	2,219,712	1,578,362	1,578,362	1.50	1.41
Separate financial statements						
			Weighted average number			
	Profit for the year		of ordinary shares		Earnings per share	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share						
Profit attributable to equity holders of the Company	2,733,543	1,553,582	1,578,362	1,578,362	1.73	0.98

29. Segment information

The Group considers to organise 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 Group's operating segments for the years ended 31 December 2022 and 2021 are as follows:

(Unit: Million Baht)

	For the years ended 31 December						
	Manufacturing and trading segment			Construction segment		Eliminated transactions	Consolidated financial statements
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>
Revenues from external customers	30,025	24,447	3,376	2,606	-	-	33,401
Inter-segment revenues	566	591	-	-	(566)	(591)	-
Total revenues	<u>30,591</u>	<u>25,038</u>	<u>3,376</u>	<u>2,606</u>	<u>(566)</u>	<u>(591)</u>	<u>33,401</u>
Segment profit	4,215	3,679	146	203	-	-	4,361
Unallocated income and expenses							(1,241)
Profit before income tax							(877)
							3,120
							3,005

Non-current assets (other than deferred tax assets)

(Unit: Million Baht)

	Geographic segment located in Thailand		Total
	<u>2022</u>	<u>2021</u>	<u>2022</u>
Non-current assets	3,759	4,033	9,643
			10,353

Transfer prices between the segments are as set out in Note 6 to the consolidate financial statements.

Revenue from external customers based on locations of the customers is as follows:

	(Unit: Million Baht)	
	<u>2022</u>	<u>2021</u>
Thailand	15,753	12,928
Overseas	<u>17,648</u>	<u>14,125</u>
Total	<u>33,401</u>	<u>27,053</u>

30. Dividend

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht per share)
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>
Final dividends for 2021	Annual General Meeting of the shareholders on 8 April 2022	1,262.5	0.80
Interim dividends for 2022	Board of Directors' Meeting on 9 November 2022	<u>394.6</u>	<u>0.25</u>
Total for 2022		<u>1,657.1</u>	<u>1.05</u>

31. Commitments and contingent liabilities

31.1 Capital commitment

As at 31 December 2022 and 2021, 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>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(Million)	(Million)	(Million)	(Million)
Baht	12	6	12	5
Malaysian Ringgit	8	17	-	-
Vietnam Dong	11,337	7,805	-	-

31.2 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 2022 are as follows:

	(Unit: Million Baht)	
	Consolidated financial statements	Separate financial statements
Within 1 year	54	41
2 to 5 years	27	20
Total	<u>81</u>	<u>61</u>

31.3 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 2022 and 2021 amounted to approximately Baht 44 million and Baht 42 million, respectively (the Company only: Baht 27 million and Baht 29 million, respectively).

31.4 Project construction cost commitments

As at 31 December 2022, the Group had commitments related to agreements of project construction costs of Baht 2,839 million (2021: 2,078 million). The Group will make payment of these commitments upon delivery of the relevant goods or services.

31.5 Bank guarantees

As at 31 December 2022 and 2021, 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	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(Million)	(Million)	(Million)	(Million)
Baht	2,056	2,019	2	2
Malaysian Ringgit	-	8	-	-

32. Financial instruments

32.1 Derivatives and hedge accounting

	(Unit: Thousand Baht)			
	Consolidated financial statements		Separate financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Derivative assets				
<i>Not designated as hedging instruments</i>				
Commodity forward contracts	-	188,302	-	188,302
Forward exchange contracts	22,035	1,632	22,013	1,498
<i>Designated as hedging instruments</i>				
Commodity forward contracts	<u>128,762</u>	<u>-</u>	<u>128,762</u>	<u>-</u>
Total derivative assets	<u>150,797</u>	<u>189,934</u>	<u>150,775</u>	<u>189,800</u>
 Derivative liabilities				
<i>Not designated as hedging instruments</i>				
Commodity forward contracts	198	192,241	198	192,241
Forward exchange contracts	2,822	3,179	2,751	3,179
<i>Designated as hedging instruments</i>				
Commodity forward contracts	<u>-</u>	<u>41,791</u>	<u>-</u>	<u>41,791</u>
Total derivative liabilities	<u>3,020</u>	<u>237,211</u>	<u>2,949</u>	<u>237,211</u>

All derivatives are measured at fair value in level 2.

Derivatives not designated as hedging instruments

The Group enters into commodity forward contracts and forward exchange contracts to manage risk against fluctuations in commodity prices and foreign exchange rates, respectively. The contracts are entered into for the periods consistent with the underlying transaction, generally from one to twelve 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 enters 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 2022 are to mature within one year and at an average hedge rate of USD 120.9 per barrels (2021: USD 82.0 per barrels).

The impact of hedged items on the statement of financial position as at 31 December 2022 and 2021 is as follows:

(Unit: Thousand Baht)

	Change in fair value used for measuring						Cash flow hedge reserve	
	ineffectiveness		Continuing hedges		Discontinued hedges			
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>		
Highly probable forecast sales	(159,592)	35,218	(154,555)	34,510	(5,037)	708		

The impact of the hedging instruments on the statement of financial position as at 31 December 2022 and 2021 and the effect of the cash flow hedge in the statement of comprehensive income for the years ended 31 December 2022 and 2021 are, as follows:

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(Unit: Million Baht)

Consolidated and separate financial statements							Amount of cash flow hedge reserve reclassified to profit or loss***		
Notional amounts	Carrying amount*		Changes in fair value used for measuring	Effectiveness recognised in other ineffective	Ineffectiveness recognised in comprehensive income	Profit or loss**	Amount of cash flow hedge reserve reclassified to profit or loss***		
	2022	2021					2022	2021	2022
Commodity forward contracts									
- hedge the risk arising from petroleum products sales	1,717	461	129	(42)	155	(35)	155	(35)	-
									(749) (285)

* 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.

32.2 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:

- Forward exchange contracts to hedge the foreign currency risk arising on the export or import of goods
- Commodity forward contracts to hedge the commodity price risk arising on sales of products

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 2022 and 2021, the balances of financial assets and liabilities of the Group denominated in foreign currencies were 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	as at 31 December	as at 31 December	as at 31 December
	<u>2022</u> (Million)	<u>2021</u> (Million)	<u>2022</u> (Million)	<u>2021</u> (Million)	<u>2022</u> (Baht per 1 foreign currency unit)	<u>2021</u>
US Dollar	57	16	28	48	34.6	33.4
Euro	8	-	8	-	36.8	37.9
Yen	-	-	8	-	0.3	0.3
Ringgit	14	20	17	20	7.8	8.0

Foreign currency	Separate financial statements					
	Financial assets		Financial liabilities		Average exchange rate	
	as at 31 December	as at 31 December	as at 31 December	as at 31 December	as at 31 December	as at 31 December
	<u>2022</u> (Million)	<u>2021</u> (Million)	<u>2022</u> (Million)	<u>2021</u> (Million)	<u>2022</u> (Baht per 1 foreign currency unit)	<u>2021</u>
US Dollar	102	62	50	76	34.6	33.4
Singapore Dollar	-	-	12	7	25.7	24.7
Euro	8	-	8	-	36.8	37.9
Renminbi	-	48	-	-	5.0	5.3
Ringgit	-	-	5	7	7.8	8.0

The Group outstanding forward exchange contracts which maturity date within one year are summarised below.

As at 31 December 2022

Foreign currency	Consolidated		Separate			
	financial statements		financial statements		Contractual exchange rate	
	Sold amount (Million)	Bought amount (Million)	Sold amount (Million)	Bought amount (Million)	Sold (Per 1 foreign currency unit)	Bought
US Dollar	31	13	31	13	34.3 - 37.7 Baht	34.5 - 35.5 Baht
US Dollar	-	10	-	-	-	23,703 - 23,781 Vietnam Dong
US Dollar	-	12	-	-	-	15,502 - 15,763 Indonesia Rupiah

As at 31 December 2021

Foreign currency	Consolidated		Separate			
	financial statements		financial statements		Contractual exchange rate	
	Sold amount (Million)	Bought amount (Million)	Sold amount (Million)	Bought amount (Million)	Sold (Per 1 foreign currency unit)	Bought
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

In addition, the Group exposes to foreign exchange risk on its 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 2022 and 2021. The Group's exposure to foreign currency changes for all other currencies is not material.

Currency	2022		2021	
	Change in FX rate	Effect on profit before tax	Change in FX rate	Effect on profit before tax
		(Thousand Baht)		(Thousand Baht)
US dollar	+1%	13,768	+1%	(11,526)
	-1%	(13,768)	-1%	11,526

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 2022 and 2021.

	2022		2021	
	Increase/ decrease	Effect on profit before tax	Increase/ decrease	Effect on profit before tax
		(Thousand Baht)		(Thousand Baht)
Interest rate	+1%	(1,926)	+1%	(2,065)
	-1%	1,926	-1%	2,065

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:

	2022			2021		
	Increase/ decrease	Effect on profit before tax	Effect on equity	Increase/ decrease	Effect on profit before tax	Effect on equity
		(Thousand Baht)	(Thousand Baht)		(Thousand Baht)	(Thousand Baht)
Crude price	+1%	-	-	+1%	(466)	-
	-1%	-	-	-1%	466	-
Petroleum price	+1%	(965)	(15,887)	+1%	(10,780)	(5,032)
	-1%	965	15,887	-1%	10,780	5,032

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 2022 based on contractual undiscounted cash flows:

	Consolidated financial statements				(Unit: Thousand Baht)
	Less than 1 year	1 to 5 years	> 5 years	Total	
Non-derivatives					
Short-term loans from financial institutions	3,253,653	-	-	3,253,653	
Trade and other payables	3,732,365	-	-	3,732,365	
Lease liabilities	121,554	314,170	76,523	512,247	
Short-term loans from related parties	116,916	-	-	116,916	
Total non-derivatives	7,224,488	314,170	76,523	7,615,181	
Derivatives					
Derivative liabilities - commodity forward contracts	198	-	-	198	

	Separate financial statements				(Unit: Thousand Baht)
	Less than 1 year	1 to 5 years	> 5 years	Total	
Non-derivatives					
Short-term loans from financial institutions	2,929,865	-	-	2,929,865	
Trade and other payables	4,203,363	-	-	4,203,363	
Lease liabilities	25,077	63,572	9,234	97,883	
Short-term loans from related parties	101,000	-	-	101,000	
Total non-derivatives	7,259,305	63,572	9,234	7,332,111	
Derivatives					
Derivative liabilities - commodity forward contracts	198	-	-	198	

32.3 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.

33. 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 2022 and 2021, these financial ratios were as follow:

Financial Ratio	Consolidated		Separate	
	financial statements		financial statements	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
Interest Bearing Short-term Debt-to-Equity Ratio	0.199 : 1	0.214 : 1	0.245 : 1	0.288 : 1

34. Approval of financial statements

These financial statements were authorised for issue by the Company's authorised directors on 9 February 2023.

Tipco Asphalt

www.tipcoasphalt.com



ควบคุมความเร็ว
ระบบ GPS
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รถพ่วง

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ATTACHMENT 1-5

- ▲ Attachment 1: Details of directors, executives, controlling persons, 90 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
- ▲ Attachment 2: Details of the directors of subsidiaries
- ▲ Attachment 3: Details of the Heads of the Internal Audit and Compliance Units
- ▲ Attachment 4: Assets for business undertaking and details of asset appraisal
- ▲ Attachment 5: Unabridged policy and guidelines on corporate governance and unabridged code of businessconduct prepared by the Company

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Attachment

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 72

Starting date of Directorship 13 August 2015

Education

- Master of Management (MM), Sasin Graduate Institute of Business Administration, Chulalongkorn University
- Bachelor of Higher Accounting, California College of Commerce, USA

2016 - Present

Frasers Property (Thailand) Plc.
(Type of business : Industrial Factory and Warehouse Development for Sale and Lease)
Independent Director, Chairman of the Audit Committee, Member of Nomination, Remuneration and Corporate Governance Committee Prima Marine Plc.

(Type of business : Providing Marine Transportation and Services)

Independent Director,
Tipco Asphalt Plc.

2015 - Present

2016 - 2017

Non-Listed Companies

2017 - Present

Chairman of the Board of Directors,
TRA Land Development Co., Ltd.
(Type of business : Property Development)

2010 - 2022

Independent Director, Chairman of the Audit Committee, Sapthip Company Limited.

(Type of business : Producing Ethanol)

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)

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 of the Board,
Independent Director, Member of Audit Committee, Chairman of Compensation and Nomination Committee and Chairman of Corporate Governance and Sustainable Development Committee

MR. KOH BAN HENG**Vice Chairman****Independent Director****Member of the Nomination and Remuneration Committee**

Age 74

Starting date of Directorship 1 July 2011

Education

- Post-Graduate Diploma in Business Administration, University of Singapore
- Bachelor 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. |
| 2016 - 2017 | Vice Chairman, Tipco Asphalt Plc. |

Non-Listed Company

2021 - Present	Independent Director, Dialog Systems Asian Pte Ltd (Type of business : Integrated specialist technical services provider midstream and upstream in the oil, gas and petrochemical industry)
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)

MS. LAKSANA SUPSAKORN**Authorized Director**

Age 70

Starting date of Directorship 15 August 2013

Education

- Master of Business Administration, Wharton Business School, University of Pennsylvania, USA
- Bachelor 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 12,760,000 shares (0.808%)

Spouse/Minor child -none-

Family Relationship with Other Directors and Executives

Sister-in-law of Mr. Somchit Sertthin

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 Sustainable Development and Corporate Governance Committee**

Age 69

Starting date of Directorship 14 May 2013

Education

- Bachelor 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)
1989 - Present	Chairman, Subhadhana Co., Ltd. (Type of business : Office for rent)

MR. NOPPORN THEPSITHAR**Independent Director****Member of the Audit Committee****Chairman of the Nomination and Remuneration Committee**

Age 69

Starting date of Directorship 27 April 2012

Education

- Ph.D (Honorable) in Logistics and Supply Chain Management, Sripatum University
- Bachelor 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. |
| 2018 - Present | Chairman, Mena Transport Plc.
(Type of business : Logistics) |
| 2011 - July 2022 | 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) |
| 2014 - 2019 | Director and Chairman of the Board of Executive Committee, 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

Independent Director

Age 72

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		1987 - 1989	Far East Financial Manager DRAGAGES ET TRAVAUX PUBLICS
2020 – Present	Director Tipco Asphalt Plc.		
Non-Listed Company			
2018 - 2022	Non Executive Director of Bouygues-Thai Ltd. Advisor to Bouygues -Thai Board.	1985 - 1988 1985 - 1987	Deputy Managing Director BOUYGUES NIGERIA Branch Manager
2018 - 2021	Non Executive Director of BYMA (Myanmar) (Type of business : Building Construction)	1980 - 1985	BOUYGUES IRAQ Administrative & Financial Manager BOUYGUES IRAQ
1994 - 2018	Managing Director BOUYGUES - THAI LIMITED, Nonthaburi, Thailand (Type of business : Building Construction)	1977 - 1980 1974 - 1977	Head of Heavy Lifting & Transport Division - Onshore KHALIFA CO./ CONOCO - CHAD Expert UNIDO – CHAD

MR. NIPHON SUTHIMAI**Independent Director****Member of the Audit Committee****Member of the Sustainable Development and Corporate Governance Committee**

Age 64

Starting date of Directorship 16 February 2006

Education

- Master of Operational Research, London School of Economics, UK
 - Licence de Droit (Law), Universite de Droit, Lyon, France
- 2017 - 2018 Vice President Corporate Affairs and Corporate Risk Management
Acting Cargo Sales Director,
Nok Airlines Plc.
(Type of business : Airline service)

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)
- 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.

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.

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 70

Starting date of Directorship 29 April 1994

Education

- Bachelor 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 11,000,000 shares (0.697%)

Family Relationship with Other Directors and Executives

Brother-in-law of Ms. Laksana 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

MR. FREDERIC GARDES

Authorized Director

Age 51

Starting date of Directorship 11 May 2018

Education

- Master of Business Administration, Bocconi University (Milano) Italy
- Bachelor 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)
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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**

Age 68

Starting date of Directorship 1 August 2000

Education

- Advanced Management Program (AMP), Harvard Business School, MA, USA
- Ecole Nationale Supérieure d' Arts et Métiers, PARIS, FRANCE

Training

- 2013 Director Accreditation Program (DCP)
- 2013 Director Certification 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**

2000 - Present Director, Tipco Asphalt Plc.

Non-Listed Company

2020 - 2022	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

MR. CHAIWAT SRIVALWAT**Authorized Director****Chairman of the Executive Committee****Member of the Sustainable Development and Corporate Governance Committee****Chief Executive Officer**

Age 62

Starting date of Directorship 13 February 2002

Education

- Bachelor of Engineering, Liverpool University, England

Training

- 2022 CEO Club 2022 : Opportunity and Challenge in Financial System and Thai Capital Market
- 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.	1983 - 1991	Plant Manager, Tipco Asphalt Plc.
1993 - 1995	Senior Plant Manager, Tipco Asphalt Plc.	Non-Listed Company	Please see list of directorship in non-listed companies on Attachment 2
1992	Group Plant Manager, Tipco Asphalt Plc.		

MR. FREDERIC ROUSSEL**Authorized Director****Vice Chairman of the Executive Committee****Member of Sustainable Development and Corporate Governance Committee****Member of Nomination and Remuneration Committee**

Age 55

Starting date of Directorship 11 August 2022

Education

- Master of Engineering, Ecole Centrale de Lille, France

Aug 2022 - Present Acting Deputy Chief Executive Officer - International Business and Construction Group, Tipco Asphalt Plc.

Training

-none-

Shareholding in Company

Director -none-

Spouse/Minor child -none-

2022 - Present General Manager in charge of Asia-Pacific, Colas SA France

2020 - 2022 General Manager in charge of Canada, Colas SA France

Family Relationship with Other Directors and Executives -none-

2015 - 2020 Deputy General Manager in charge of Canada, Colas SA France

Related Experience**Listed Company**

Aug 2022 - Present Director, Tipco Asphalt Plc.

Non-Listed Company

Please see list of directorship in non-listed companies on Attachment 2

EXECUTIVE OFFICER

MRS. KANYA RUENGPRATEEPSANG

Member of the Executive Committee

Chief Financial Officer

The person assigned to take the highest responsibility in Accounting and Finance

Age 57

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)
- 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

Training

- 2022 TLCA CFO Introduction to Sustainable Finance (CPD 2 hours)
- 2022 TLCA CFO Role of CFO in sustainability (CPD 2 hours)
- 2022 TLCA CFO Digital Asset and CFO role (CPD 2 hours)
- 2022 TLCA CFO PDPA for Accounting and Finance (CPD 2 hours)
- 2021 CFO Refresher 2/2021 by the Stock Exchange of Thailand (CPD 6 hours)
- 2021 CFO Professional Development Program No. 2,3,4 and 6 by Thai Listed Companies Association (CPD 8 hours)
- 2021 Independent Director Forum
- 2021 CFO's Orientation Course for New IPOs 5/2021 by the Stock Exchange of Thailand (CPD 9 hours)
- 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

- 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 160,000 (0.010%)
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 52

Education

- Bachelor of Engineering (Civil Engineering),
ALES Mining school, France

Shareholding in Company

Executive Officer 250,000 shares (0.016%)
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)

MR. CHRISTOPHE BERNARD VOY

Member of the Executive Committee

Chief Operating Officer - International Business

Age 56

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 49

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.	2014	Plant Manager – Nakornratchasima, Tipco Asphalt Plc.
Jun - Aug 2021	Chief Operating Officer - International Business Tipco Asphalt Plc.	2012 - 2013	Senior Manager – Domestic Asphalt Product Sales, Tipco Asphalt Plc.
2015 - 2021	Director – International Sales & Marketing, Tipco Asphalt Plc.	2010 - 2012 2001 - 2004	Group Manager – International Sales and Marketing, Tipco Asphalt Plc. Senior Technical Officer, Tipco Asphalt Plc.
			Non-Listed Companies

Non-Listed Companies

Please see list of directorship in non-listed companies on Attachment 2	
Sep 2021-Present	Managing Director, Thanomwongse Service Co., Ltd. (Type of business : Road construction and maintenance service)
Present	Marketing Manager, Kemaman Bitumen Company Sdn. Bhd. (Malaysia) (Type of business : Asphalt refinery)

MRS. UDOMPORN PUNPATCH**Chief People Office**

Age 61

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

- 2022 CEO dialogue - Human Rights forum for listed company (Phase 2)
- 2019 Human Rights forum for listed company
- 2019 Asia Women's forum

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-			

MS. 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 40

Education

- Master of Business Administration Faculty of Commerce and Accountancy Thammasat University
- Bachelor of Accounting, Faculty of Commerce and Accountancy Chulalongkorn University

Training

- 2022
 - Course "Thai Financial Reporting Standard relate to property, plant and equipment" (CPD 6 hours) by Department of Business Development
 - Course "Overall tax relate to manufacturing and distribution, international business center, marine transportation and construction business" (CPD 13 hours) by EY Corporate Services Limited
 - Summary of TFRS that have been changed and effective in 2023 by The Stock Exchange of Thailand
- 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 38

Education

- MBA Program, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Bachelor of Engineering, King Mongkut's Institute of Technology, Ladkrabang

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 document

Training

- 2022 CGR Workshop 2022
- 2022 Integrating ESG into Business Strategy
- 2022 PDPA for Company Secretary
- 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)
- 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. |



Attachment

POSITIONS IN SUBSIDIARIES. JOINT VENTURE AND ASSOCIATED COMPANIES

Board of Directors members and top management holds management and authorized positions in subsidiaries, joint ventures associated companies or other related companies are as follows:

3 Attachment

Details of the Head of Internal Audit

Mr. Joseph Mugilen Soosay Manickam

Senior Manager - Internal Audit Department

Age 50

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, Pricewaterhouse Coopers FAS Ltd.

4 Attachment

Assets used in the business operation

Fixed asset of the Company and subsidiaries as of 31 December 2022

Type of asset	Net Book value (THB million)	Ownership	Collateral
Land including:	254.65		
- Nakhon Ratchasima plant (Ar-ea: 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	108.17		None
Building and property	435.73	Company	None
Machinery and equipment	3,871.63	and subsidiaries	None
Furniture, office equipment and vehicle	371.15		None
Vessels	2,287.31	Subsidiaries	None
Sub-total	7,328.64		
Property under construction	258.20	Company and subsidiaries	None
Total	7,586.84		

Intangible Assets

Intangible asset of the Company and subsidiaries include:

	Net Book value (THB thousand)	Remark
Computer software	29,792	Straight Line Depreciation: 5 years
Customer relationship	115,822	Straight Line Depreciation: 8-29 years
Backlog	45,492	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.

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.

5 Attachment

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/?lang=en>
 - Code of Ethics:
<https://www.tipcoasphalt.com/corporate-governance/code-of-ethics/?lang=en>
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/?lang=en>
 - Audit Committee
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/audit-committee/?lang=en>
 - Sustainable Development and Corporate Governance Committee
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/corporate-governance-committee/?lang=en>
 - Nomination and Remuneration Committee
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/nomination-remuneration-committee/?lang=en>
 - Executive Committee
<https://www.tipcoasphalt.com/about-tipco-asphalt/board-of-directors-and-sub-committee/executive-committee/?lang=en>



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