



IEC
since 1922

The International Engineering Public Company Limited

ANNUAL REPORT 2022





The International Engineering Public Company Limited

Vision

IEC's vision is to become the leader in Renewable Energy and in Information and Communication Technology by integrating human resource development and implement modern technology in order to achieve effective management goals

Mission

IEC's mission is to operate business as well as promoting operation in accordance with the principle of corporate governance and stakeholder responsibility, developing the management system, various products and services to further on creating and adding value by expanding in the renewable energy business and information technology business. Lastly, we also seek to adapt to the changing business environments in order to become a modern organization, both on domestic and international standard.

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Financial Highlights

Unit : Million Baht

Financial Highlights	2022	2021	2020
Total Asset	1,046.44	1,501.77	1,559.94
Account Receivables	31.92	59.92	48.66
Total Liabilities	341.46	370.93	443.74
Total Equity	704.98	1,130.83	1,116.20
Total Revenue	368.45	572.85	573.76
Total Expenses	84.07	73.93	66.08
Net Profit (Loss) After Tax (Consolidated)	(427.64)	14.56	31.25
Net Profit (Loss) After Tax (The Company)	(293.58)	130.42	39.75
Earning per Share (Baht)	(0.69)	0.02	0.00013
Net Profit Margin (%)	-116%	3%	5%
ROE (%)	-61%	1%	3%
ROA (%)	-41%	1%	2%
Debt to Equity (time)	0.48	0.33	0.40
Interest Coverage Ratio (time)	-67.88	1.29	0.74
Total Asset Turnover (time)	0.35	0.38	0.37

Company Historical Data

The International Engineering Public Company Limited (“the company” or “IEC”) was established in 1922 with the objective to construct the Bangkok-Aranyaprathet Railway. IEC registered as a Thai national company in 1953 with a registered capital of 10 million baht. In 1965, IEC was appointed as a “Royal Appointment” company and conferred a “garuda charter” under the royal permission. In 1983, Siam Cement PCL (SCG) invested and took full control of IEC operations; IEC accordingly became an affiliate of the Siam Cement Group. In 1990, Siam Cement PCL changed its investment policy prompting IEC’s management to invest in itself, and acquired new investors. Joined by a group of additional investors, IEC management increased the registered capital to 120 million baht. In 1992, the company was listed in the Communication Sector of the Stock Exchange of Thailand (SET). In 1993, IEC became a “Public Limited Company” and the registered capital has been raised continually.

With the community growth, huge increase in demand for electricity and waste management was foreseen. In order to respond to these needs, energy business and other relevant business had been initiated. By 2022, the company’s operations consist of 2 business groups including (1) Energy Business: Solar Power Plant, Waste-to-Energy Power Plant, Biomass Power Plant (2) Information and Communication Technology Business.

Significant Changes and Development

Significant Changes and Development related to business operation and management during 2017 - 2022

- October 20, 2017 : IEC's EGM No.1/2017 dated October 20, 2017 had the following significant resolutions:
- (1) Approve the reduction of the Company's registered capital from THB 2,440,745,055 to THB 2,440,661,250.76 by cancelling 8,380,424 unsubscribed shares.
 - (2) Approve the increase of the Company's registered capital by THB 2,035,915,023.50 from THB 2,440,661,250.76 originally to the new total of THB 4,476,576,274.26 by issuing new 203,591,502,350 ordinary shares at the par value of THB 0.01 each.
 - (3) Approve the allotment and offering of the Company's 203,591,502,350 new ordinary shares at the par value of THB 0.01 via right offerings at the ratio.
- February 26, 2018 : The Company have sold all the investment in Nongree Power Plants Co., Ltd, totaling 500,000 shares which is equivalent to 100 % of the paid-in capital of the aforementioned company.
- March 15, 2018 : IEC Green Energy Co., Ltd, the Company's subsidiary, purchased the remaining ordinary shares of GIDEC Co., Ltd. ("GIDEC") totaling 2,000,000 shares which is equivalent to 50% of the paid-in capital of the aforementioned company, resulting in IECG owning 100% of GIDEC's shares.
- October 12, 2018 : The company received the allocated money from selling newly issued ordinary shares of 45,744,275,772 units in the amount of 571.80 million baht.
- March 29, 2019 : The Company has submitted the Financial Statement year 2016.
- May 22, 2019 : The last period of the IEC-W2 exercise at 9,760,547 shares at the exercise price 0.045 baht per share. (IEC-W2 Expired)
- June 20, 2019 : The Stock Exchange of Thailand ("SET") has revoked the ordinary shares of the International Engineering Public Company Limited from being the listed securities, effective on July 10, 2019 and opened for trading from July 1-9, 2019.
- June 27, 2019 : The Company disagreed with SET's order to revoke the ordinary shares, then the Company has exercised its legal right to file a case against the SET to the Administrative Court of Thailand. Currently, the case is under consideration of the Court.
- (in Year 2021-Present, the Company did not have pending financial statements submission)

- November 11, 2022: At the Extraordinary General Meeting of Shareholders No.1/2022 dated November 11, 2022, the following important resolutions were passed:
- (1) Approved the change in par value of the shares by combining the share value (combining par to 4 baht) and amended Clause 4 of the Company's Memorandum of Association
 - (2) Approved the reduction of the Company's registered capital and paid-up capital by reducing the par value of shares from 4 to 0.50 baht to use the surplus from capital reduction to offset against the Company's accumulated loss and amended Clause 4 of the Company's Memorandum of Association
- February 8, 2023: The Company registered the reduction of the Company's registered capital and the paid-up capital by reducing the par value of shares from 4 to 0.50 baht at the Department of Business Development.

Board of Directors



Mr. Komol Jungrungruangkit
Chairman



Pol.Maj.Gen Somnuk Burame
Chairman of the Audit Committee /
Independent Director



Mr. Chalerm Suepugdee
Audit Committee / Independent Director



Mr. Sakda Sinives
Audit Committee / Independent Director



Ms. Ploykarin Sujjavata
Director / Chief Executive Officer



Mr. Pornthep Itsoponpun
Director



Mrs. Chanidapa Wanichcharoensuk
Director



Mr. Polsan Teowsomboonkij
Director

Executive Management

1. Ms. Ploykarin Sujjavata :

Chief Executive Officer

2. Miss Duangjai Nilapan

Acting Senior Executive Vice President – ICT

Executive Vice President – ICT

3. Miss Thitirat Kuanun Effective Date : Since 1 March 2021

Chief Financial Officer

*As available in details of Executive Management

IEC's Business Structure and Investment in Subsidiaries

The company's and its subsidiaries' policy and operational sectors: The International Engineering Public Company Limited (IEC) has categorized its business, in 2022, into 2 groups as follows.

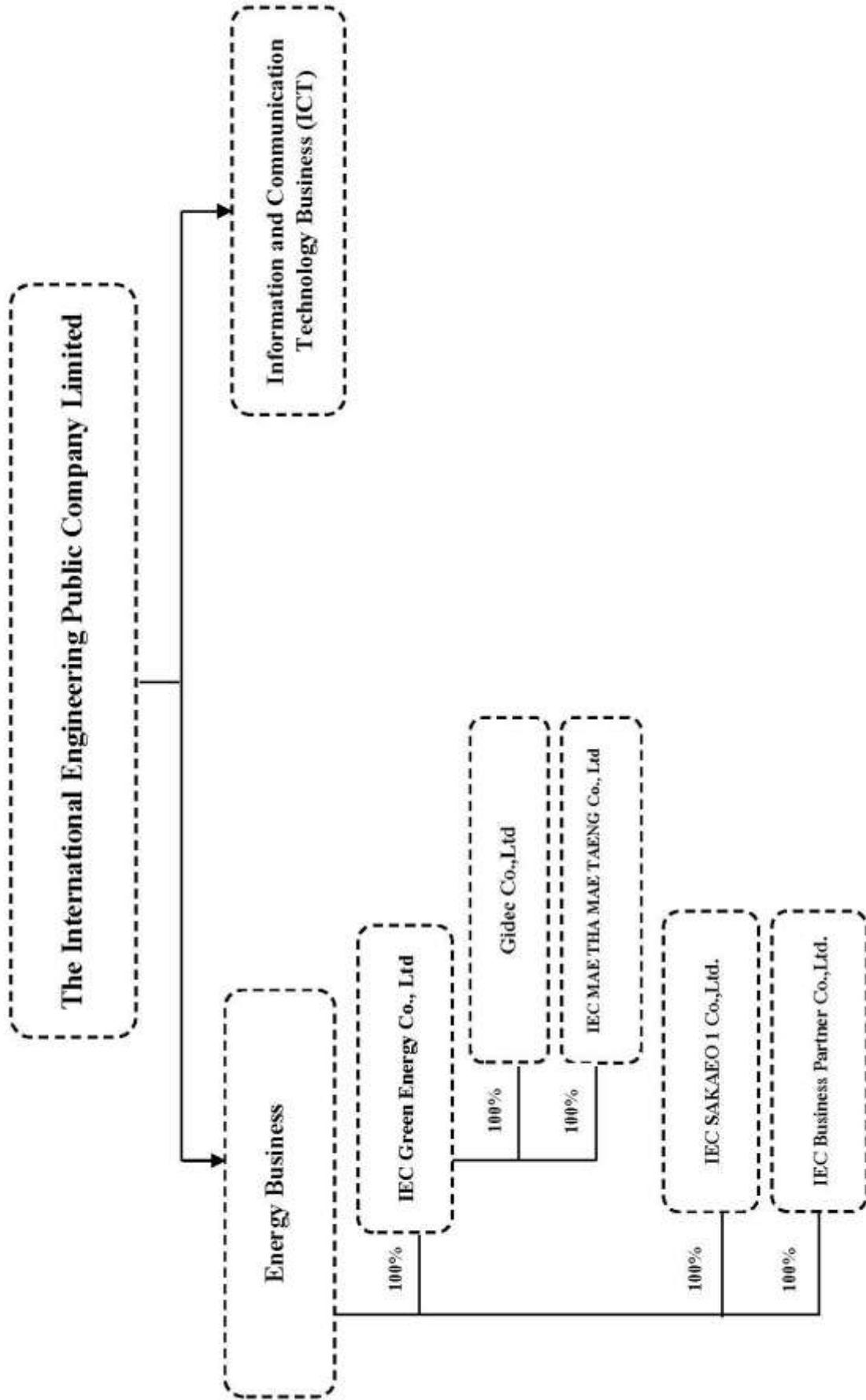
(1) Energy Business

- 1.1 Solar Power Plant under the management of IEC Mae Tha Mae Taeng Co., Ltd.,
a subsidiary of the company.
- 1.2 Waste-to-Energy Power Plant under the management of GIDEC Co., Ltd.,
- 1.3 Biomass Power Plant under the management of IEC Sakaeo 1 Co., Ltd.,
a subsidiary of the company.

(2) Information and Communication Technology Business (ICT)

ICT: Provision of services related to information technology under the role of System Integrator in collaboration with alliances in bidding for government projects and private.

IEC's Business Structure



Each business group's revenue proportion and subsidiaries' revenue structure

	% Share	Year 2022		Year 2021		Year 2020	
		Million Baht	%	Million Baht		Share	Million Baht
The Company's Products and Services							
<i>Information Technology</i>	100	41.49	10.77	65.78	11.48	84.16	14.67
<i>Mobile Phones</i>	100	-	-	-	-	-	-
<i>Engineering Products</i>	100	-	-	-	-	-	-
<i>Other Revenue</i>	100	31.71	8.23	54.82	9.56	14.26	2.48
Total Distribution Value		73.20	19.00	120.60	21.04	98.42	17.15
Energy Business Group							
<i>IEC Green Energy Co., Ltd.</i>	100	-	-	-	-	-	-
<i>GIDEC Co., Ltd.</i>	100	56.98	14.79	156.56	27.30	181.20	31.56
<i>IEC Mae Tha Mae Taeng Co., Ltd.</i>	100	61.69	16.02	57.65	10.06	64.31	11.20
<i>IEC Sakaeo 1 Co., Ltd.</i>	100	193.34	50.19	238.49	41.60	230.23	40.09
<i>IEC Business Partners Co., Ltd.</i>	100	-	-	-	-	-	-
Total Revenue of Energy Business Group		312.01	81.00	452.70	78.96	475.74	82.85
Engineering Consulting Business Group							
<i>E-Contech Management Pte.Ltd</i>	100	-	-	-	-	-	-
TOTAL Revenue of IEC and Subsidiaries		385.21	100.00	573.30	100.00	574.16	100.00

Nature of Business

The company's operations consist of two business groups including (1) Energy Business: Solar Power Plant, Waste-to-Energy Power Plant, Biomass Power Plant (2) Information and Communication Technology and

1. Energy Business

Power production from renewable energy such as solar, waste, biomass, biogas, etc. Renewable energy is used in the power production where the feedstock can be locally sourced. The company foresaw such significance and began operating renewable energy business, including conducted researches in order to enhance the efficiency of renewable energy usage for an increase of economic benefits. At present the company operates power plants using renewable energy in many forms such as solar power plant, waste-to-energy power plant, biomass power plant.

1.1 Solar power plant business

Characteristics of products and services

The solar power plant is a type of business with no complexity in operations. It also has strengths regarding raw materials for production. Since solar energy is unlimited and there is no combustion in the production process, it does not impact the environment. Besides, the public sector's policy supports the buying price of electricity. This leads to a high stability of business.

All 2 solar power plants of the company are of Grid type which are able to convert direct current (DC) into alternating current (AC) that can be connected to the generating system of Provincial Electricity Authority.

The solar power plants of the company have 4 power purchase agreements (PPA) with Provincial Electricity Authority. The total power report capacity is 3.84 MW. The plants are operated by its following subsidiaries.

Operating Subsidiary	Location	COD ¹	Power Report capacity (Total) MW
IEC Maetha Mae Taeng Co., Ltd.	Takat sub-district, Maeta district, Lampoon province	Sep 23, 2013	1.92
	Keelek sub-district, Mae Taeng district, Chiang Mai province	Jun 30, 2014	1.92
Total produced power			3.84

¹ COD : Commercial Operation Date

- Solar power plant, Maetha district, Lampoon province

The installed capacity of power production is 2.638 MW in total with the use of thin-film solar cell panel from Solar Frontier (Model SF 140S) made in Japan, power inverter (DC/AC) from SMA (Model STP 17000 TL-EE-10), string inverter type made in Germany. Voltage is converted by transformer and generated to 22 kV cables with quality approved after the test made by Provincial Electricity Authority.

- Solar power plant, Mae Malai district, Chiang Mai province

The installed capacity of power production is 2.304 MW in total with the use of crystalline silicon solar panels from JA Solar (Model JAP6 60 250) made in China, power inverter (DC/AC) from SMA (Model STP 20000 TL-EE-10), string inverter type made in Germany. Voltage is converted by transformer and generated to 22 kV cables with quality approved after the test made by Provincial Electricity Authority.

Marketing and Competition

The distribution of electricity operated under Power Purchasing Agreement – PPA with the Provincial Electricity Authority, which will be effective for 5 years and will be automatically renewed every 5 years. The agreement shall be effective until the electricity producer submits a notification to the Provincial Electricity Authority, indicating their intention to terminate the trade of electricity.

Therefore, it ensures the stable revenue from electricity sales with no marketing competition.

Product Supply and Service

Solar cell or Photovoltaic system consists of 5 important parts.

(1) PV module that converts solar energy to electrical energy in the form of direct current (DC) by using several PV Module connected to other ones to obtain the electrical power as required.

(2) Inverter that converts the produced direct current (DC) to alternative current (AC).

(3) Main Distribution Board that controls the electricity generation and cut low-voltage three-phase system.

(4) 22kV Step up Transformer that shifts the three-phase voltage to be equal to the transmission system of the Provincial Electricity Authority.

(5) 22kV Switch Gear that connects/cuts the electricity system of power plant and transmission system of Provincial Electricity Authority.

The company's solar power plants were installed with the main electrical equipment that meets quality standards and is warranted by the manufacturer. All equipment, both domestically produced and imported, has passed the test in accordance with the Provincial Electricity Authority requirements. The equipment includes PV Module imported from Japan and China, inverters imported from Germany, transformers manufactured in Thailand. We believe that all of the company's solar power plants are capable of producing good quality of electricity as required by the customers.

Project not submitted - None-

1.2 Waste to Energy Power Plant

Characteristics of products and services

The increase of waste volume causes problems in waste management. Although the landfill method which is currently used needs the lowest investment, it impacts the community in pollution and scenery aspects. At present, building a new landfill site is difficult because of the opposition from community locals. The local public sectors are unavoidably facing problems in planning waste management.

The company has formed a joint venture with Electricity Generating Public Company Limited or EGCO to run projects related to electricity generation from waste energy under a company named Gidec Co., Ltd. We constructed a waste disposal plant to transform waste to energy with the maximum installed capacity of 7.0 MW and the maximum capacity to produce electricity to Provincial Electricity Authority of 6.5 MW (Adder price is fixed at 3.50 baht/unit for a period of 7 years) according to electricity sales agreement with Provincial Electricity Authority. The agreement became effective upon the day that both parties mutually signed the contract. The effective

duration of the contract is 5 years and shall be automatically renewed every 5 years from the commercial operation date December 11, 2014.

The meeting of the board of directors of IEC Green Energy No.4/2018 dated 15 March 2018, the full subsidiary of The International Engineering Public Company Limited, as approved by the Company's BOD meeting No.2/2018 dated 26 February, resolved to approve IECG purchase of GIDEC Co., Ltd.'s ordinary shares, a subsidiary of IECG, from EGCO, resulting GIDEC becoming wholly-owned subsidiary of IECG.

The waste-to-energy plant of the company is located at Hat Yai district, Songkla province. It is the first waste-to-energy plant with ash-melting gasification in Thailand, operating with high technologies developed and generally accepted in Europe. The plant use the construction technology from Finland. The company signed a waste management agreement with Hat Yai for Municipality for the duration of 25 years and 12 local administration offices in Songkhla. Over 250 tons of waste are transferred to the company every day to produce energy. Such quantity of waste is enough to be used as the burning materials to produce electricity with full potential.

Marketing and Competition

The implementation of renewable energy project is different from the implementation of other businesses as it is a project that has an impact on the community and society as a whole. The company's partner of contract is local administration offices that are responsible for the maintenance of the environment and their community. The implementation needs to start from bidding the project in accordance with the government's regulations. Once we have been selected, we can proceed this project as agreed with the local administration offices according to the terms and conditions throughout the contractual effective period.

However, the company is also committed to have a smooth operation. The company also have prepared the budget for Corporate Social Responsibilities (CSR) and build a good relationship with the local community. In addition, The company has been creating jobs and income for local people and aimed at creating a better communication between the company and community for Industrial Peace.

Product Supply and Service

The waste management begins from receiving daily waste from the community, bringing waste to sorting system, then grinding them to form the required size and at the same time reduce/control the humidity. Then, the grinded waste will be put in a Gasifier to dispose the waste and transform it to be heat energy for the steam generator system (Boiler) as an energy source of Turbine Generators to produce electricity.

The project was designed as we are aware of the importance of environment preservation. There is control and treatment system for air, water pollutions and waste. For air pollution treatment, the system is equivalent

to European standard (EU Standard). The wastewater treatment system consists of wastewater treatment pond that meets the standard of the Department of Industrial Works, where treated water is used in the process.

The goal is to make this project a model with the use of modern technology and appropriate management, which are environmentally friendly. We also promote the waste management in the community that is consistent with hygienic principles. The project is well supported by both the contract partner which is Hat Yai municipality, Songkla province, and the locals in the community who welcomed and helped us to sustainably solve the problems of waste. This project has many supporting factors such as the location which is in the same area as the landfill of the contract partner. It means that the supply of resource will be stable in a long run, and it ensures the stability of operation as well.

Project not submitted - None-

1.3 Biomass Plant Business

Characteristics of products and services

The electricity production with biomass technology is the production with direct-fired system. The system uses the biological resource such as wood barks or wood chips to burn and transfer the heat to the steam boiler. As a result, we get very high temperature and high pressure steam. It will drive the steam engine that is connected to the electricity generator, which will produce the electricity.

For biomass power plant which is operated by its subsidiary named IEC Sakaew 1 Co., Ltd.: SK 1 (formerly Kaeow Lumduan Power Supply Co., Ltd.: KPS is a power plant with a total capacity of 9.9 MW with the use of wood chips, wood barks, palm bunches, and bagasse as the feedstock in the production, which can sufficiently be acquired within the province.

SK 1 entered into a Power Purchase Agreement (PPA) with the Provincial Electricity Authority for 8 MW (non-firm type). For this PPA, SK 1 shall be entitled to Adder for 7 years. SK 1 commenced its commercial activities on the April 10, 2013. Therefore, the income of SK 1 shall be in accordance with a standard PPA. It will be calculated as per the electricity units sold.

Under the present PPA, SK 1 has been already entitled to change the electricity selling price system from Adder to FiT (Feed-in-Tariff).

The Amendment Agreement of the Power Purchase Agreement VSPP-PEA-081/2555 No. 1, the Renewable Energy Power Generation Project changed from Adder to Feed-in Tariff (FiT) on September 26, 2016.

The Agreement shall come into force on the date it is signed by both parties. The Amendment Agreement to FiT shall end on April 9, 2029.

Marketing and Competition

Implementation of such power plant is different from other type of business as the business has only one customer i.e. Provincial Electricity Authority, a trustworthy public agent. When the project starts operating for commercial purpose, the produced power can be sold to PEA as per the PPA.

Product Supply and Service

The main raw material for SK 1's production of electricity includes agricultural waste such as palm bunches, wood chips, wood barks, and bagasse which can be found throughout the year within Sakaew province. Many wood companies can send the raw materials to SK 1. Palm bunches can be found throughout the year but the price depends on the market and season, whilst palm production depends on the reaping season. The feedstock vendors shall be responsible to supply feedstock as previously agreed to SK 1.

Daily feedstock demand

The daily feedstock demand depends on the mode of machine operation in order to achieve the required volume of electricity (8 MW per day). The heating value can be fixed to allow usage of low-cost material such as wood barks, palm bunches, and wood chips. The required amount of feedstock depends on the type of feedstock and its moisture content.

Project not submitted - None –

2. Information and Communication Technology : ICT

The company has established and developed an Information and Communication Technology (ICT) business group with a vision that the information technology will be able to take an importance role in supporting the operation as well management and development of organizations, in order to respond to the increasing business demands in both public and private sectors.

With 15-year experience in managing important IT projects and internationally renowned business alliances as well as excellent service, ICT business operation is the Company's strength. Every project we implement, high standard equipment and solution system are tailored based on specific requirements of each individual organization, in order to maximize their return on investment.

Characteristics of product and service

The company's ICT line of work includes comprehensive information technology and communication systems installation; design and application of hardware, software, network system; repair and maintenance services to meet the customer's needs. Our team of system developers and engineers provide support for design and development works as well as training programs for the customers.

In 2008 – 2012, the Company implemented Integrated Billing & Customer Services System and Billing Mediation (IBACSS) for the National Telecom Public Company Limited or NT PCL (the merger of CAT and TOT Telecom PCL registered as the National Telecom Public Company Limited since 7 January 2021) with the project value of 953.36 million baht. Following the success of the project, in 2013, the company was entrusted by NT PCL to complete various projects including: to operate their customer information management system project (Unified Database) with the project value of 211.48 million baht, to establish an [Enterprise Payment Integration System](#) in 2015 with the project value of 20.70 million baht, to develop a plan for an OM Unified backup system worth 51.73 million baht in 2018 and to increase a CRM system efficiency worth 63.88 million baht. Since 2013, the Company has been continuously entrusted by NT to maintain and repair equipment, IBACSS systems and unified database until now. In 2022, the Company signed the Unified Database Repair and Maintenance Service Contract and two additional IBACSS repair and maintenance projects. The total equipment and system repair and maintenance value is 423 million baht.

Market, Distribution and Distribution Channels

The Company's main customers are public sector, state enterprises, and private companies, whose works are normally acquired by the Company through bidding process. As our products and services involve advance technology, during the offer or presentation there must be specialists in various field of knowledge and cooperation with domestic and international section to gain customers' confidence. The Company also offers a product demonstration and trial to ensure customer satisfaction with the quality of our products and services.

In 2022, our principal customer is still NT PCL who has been recurrently hiring us for the past 15 years. In the past, the Company had an opportunity to present products and solutions to meet National Telecom Public Company Limited's business plans, e.g., products from Nintex Co., Ltd. in Digital Transformation such as AI/Machine Learning, Robotic Process, Procedure eBook, Low-Code Development and Digital Signature.

Competition Strategies

Our key strategy is having a team of experienced IT project management specialists and business alliances in various types of products, both hardware and software. We focus on cooperating with internationally renowned alliances who offer modern technology products at a reasonable price, have skilled and knowledgeable personnel with readiness to perform aftersales services such as having user coverage service centers, have fast manufacturing and distributing capacity to supply products to large public or private sectors on time. Apart from good product and service, the essential factor of competitiveness is being a good business partner with customers i.e. the Company

should be a good business consultant offering advice, supporting the customers and ensuring the customers the best products or services within their appropriate budget.

Competition status

Information technology is a key transformative factor for businesses and organizations. Keeping up with the latest information technology trend each year is crucial for the Company to be at the forefront of the technology advancement and able to compete with emerging entrepreneurs.

At the end of 2022, although the Covid-19 epidemic outbreak seemed to subside, doing business may be considered quite difficult. With uncertainty that seems to have no end, it affects a large number of crises in terms of money, energy and climate that are all concerned.

No matter what the global situation is, “Technology is always key” in all eras. Gartner, a leading global technology research consulting firm recently pointed out the ten strategic technology trends for 2023, which everyone should give an eye on and monitor each technology continuously. Let’s understand and give an opportunity for each technology and for what should be done over the next three years in this article.

Technology is of course a significant component to move the business sector forward. However, Gartner made it clear that the first priority before applying technology is the reason because each strategic technology has different effects on business goals, including the emergence of each technology that may arise in different periods. Thus, each organization should take into account various factors and may gradually do it step by step without rushing too much.

Gartner grouped 10 strategic technologies into the 4 following themes to give an overall picture.

1. Optimizing IT systems for greater reliability and improving more accurate data-driven decision making
2. Scaling vertical offerings, increasing the pace of product delivery and enabling connectivity everywhere.
3. Pioneering business model change, reinventing engagement with employees and customers, and accelerating strategies to tap new virtual markets.
4. Sustainable technology that after this, all solutions and products must be always considered how much sustainable they are.

Theme 1: Optimize

Digital Immune System

As CIOs increasingly take on revenue generating responsibilities, antiquated development and testing approaches are no longer sufficient for delivering robust and resilient business-critical solutions that also provide a superior user experience. A Digital Immune System (DIS) combines several software engineering strategies such as observability, automation, and extreme testing to enhance the customer experience by protecting against operational and security risks. By 2025, Gartner predicts that organizations that invest in building digital immunity will increase end-user satisfaction through applications that achieve greater uptime and deliver a stronger user experience.

Applied observability

The path to data-driven decision making includes a shift from monitoring and reacting to data to proactively applying that data in an orchestrated and integrated way across the enterprise. Doing so can shorten the time it takes to reach critical decisions while also facilitating faster, more accurate planning. Gartner notes observable data as an organization's "most precious monetizable asset" and encourages leaders to seek use cases and business capabilities in

AI Trust, Risk and Security Management (AI TRiSM)

As artificial intelligence algorithms grow increasingly sophisticated and complex, leaders increasingly must bake governance, trustworthiness, fairness, reliability, efficacy and privacy into AI operations. AI TRiSM includes tools and processes that make AI models easier to interpret and explain while improving overall privacy and security. By 2026, companies that operationalize AI transparency, trust, and security will see AI models achieve 50% result improvement in terms of adoption, business goals and user acceptance, Gartner says.

Theme 2: Scale

Industry cloud platforms

Gartner predicts more organizations will use industry-specific cloud platforms to drive agility, speed to innovation and accelerated time to value. This includes incorporating cloud software, platform and infrastructure services traditionally purchased a la carte into pre-integrated yet flexible tools that are suited to meet the needs of specific industry verticals. The packaged capabilities can serve as building blocks on which organizations can build new and differentiating digital initiatives, Gartner says.

Platform Engineering

Modern software architectures are continuing to grow in complexity, and end-users are often asked to operate these services with a non-expert level knowledge. As a response to this growing friction, platform engineering has emerged between the service and the end-user to deliver a curated set of reusable self-service tools, capabilities, and processes, optimizing the developer experience and accelerating digital application delivery. Gartner predicts that by 2026, 80% of software engineering organizations will establish platform teams with 75% of those including developer self-service portals.

Wireless-Value Realization

By 2025, Gartner expects 50% of enterprise wireless endpoints will use networking services that deliver additional capabilities beyond communication, up from less than 15%. Wireless-value realization refers to the expanding range of next-generation wireless protocols and technologies that will deliver value beyond connectivity, ranging from location tracking, to radar sensing, to ultra-low-power energy harvesting.

Theme 3: Pioneer

Superapps

In the age of smartphones and a digital-native generation, demand has grown for mobile-first experiences that provide a host of various services with a user-friendly interface. This demand has caused a trend of organizations embracing superapps, a composable application and architecture that provides end-users with a set of core features and access to independently created “miniapps” that allow for a consistent and personalized user experience within a single app. Gartner predicts that more than 50% of the global population will be daily active users of multiple superapps by 2027.

Adaptive AI

Adaptive artificial intelligence enables models that can self-adapt in production or change post-deployment using real-time feedback from past human and machine experiences. This is increasingly important as decision making is rapidly becoming more connected, contextual, and continuous. By 2026, Gartner predicts that enterprises that adopt AI engineering practices to build and manage adaptive AI systems will outperform their peers in the operationalizing AI models by at least 25%.

Metaverse

Gartner defines the metaverse as a combinatorial innovation, as opposed to a singular technology, that joins multiple trends in technology into a collective virtual environment where people can enhance the physical reality. This innovation transforms the physical world or extends it into a virtual world where organizations can improve employee engagement and collaboration. Although Gartner warns that the metaverse is still in its nascent stages and the viability of long-term investments are uncertain, it predicts that by 2027, over 40% of large organizations worldwide will be using Web3, spatial computing, and digital twins to increase revenue through metaverse-based projects.

Theme 4: Sustainability

Sustainable Technology

Sustainable technology is an area that has risen to the top of priority lists for many company executives and should be looked at as a framework of solutions that increase the energy and material efficiency of IT services, enable sustainability of both the enterprise and its customers, and drive environmental, social, and governance (ESG) outcomes. Through the use of technologies such as artificial intelligence, automation, advanced analytics, and shared cloud services, among others, companies can improve traceability, reduce environmental impact, and provide consumers and suppliers with the tools to track sustainability goals. By 2025, Gartner predicts that 50% of CIOs will have performance metrics tied to the sustainability of the IT organization.

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Product Supply or Service

The company, in collaboration with alliances specializing in technologies both domestically and internationally, offer information technology system service that meets the needs of each project of customer. Our key alliances include IBM Thailand Co., Ltd., Oracle Corporation (Thailand) Co.,Ltd. and Hewlett-Packard (Thailand) Co., Ltd. and new partners in 2022, namely Nintex Co., Ltd.

The significant turning point for our ICT business group was the completion of 2 major projects for the National Telecommunications Public Company Limited; the Integrated Billing & Customer Services System and Billing Mediation (IBACSS) project worth 953.36 million baht in 2008-2012 and the customer information management system (Unified Database) project worth 211.48 million baht in 2013. The success of these projects led to the Company being entrusted to maintain and repair both systems from then on and to expand into new projects, such as the OM Unified backup system development project, Customer database (CRM) system optimization project, etc.

Projects in process

Recent projects operated by the Company can be divided into the two categories:

1. Maintenance Project: The Company delivers maintenance and repair work on a monthly basis subscription for a period of 12 months without warranty period such as
 - a. IBACSS Maintenance and Repair Project
 - b. Unified Database System Maintenance and Repair Project
 - c. Enterprise Payment Integration System Maintenance and Repair Project
 - d. Upgrade 4G System Maintenance and Repair Project
 - e. ICS Maintenance and Repair Project
2. Turnkey Project: The company will complete a made-to-order system development and deliver the ready-to-system to the project owner within the project timeframe with a warranty period. These projects are:
 - 2.1 A backup system development plan for OM Unified, expected to be delivered within the first quarter of 2023.
 - 2.2 The Customer database (CRM) system optimization, expected to be delivered within the first quarter of 2023.

Business Group

Energy Business



Solar Power Plant



Waste to Energy



Biomass Power

ICT Business



Situation of Energy

Plan of PDP2018

From the resolution of the Cabinet, the draft power development plan of the country for 2018-2037 (PDP 2018) was approved on 30 April 2019, with the PDP 2018 plan being the main plan for the country's electricity supply to meet the demand and to support the country's economic growth with the plan time-frame in consistent with the 20-year national strategic plan (2018-2037). Develop electricity production to suit the demand and the potential of each region as well as taking in to account the correlation of electricity production investment, the stability of the power transmission system and the promotion of competition under supervision to ensure maximum efficiency and stability.

Summary of PDP 2018 plan

1. Allocation of new power plants; in the year 2037, the total power capacity will be 77,211 megawatts with a new power capacity of 56,431 megawatts, to support the demand for electricity in 2037 and to replace the power plant discharged from the system.
2. With new primary fossil fuel power plants, the proportion of electricity generation from coal-fired power plant will be reduced from what is in the PDP 2015 plan to cut down carbon dioxide emissions in accordance with the COP 21 agreement and to reduce conflicts among local people. By switching to, nowadays cheaper natural gas, the electricity cost can be kept at a reasonable level.
3. The proportion of fossil fuels use is 65%, consisting of natural gas (53%) and coal and lignite (12%).
4. The proportion of electricity generation from non-fossil fuels is 35% while the proportion of that from coal fuels is reduced to 12%.
5. There is an allocation of new renewable energy power plants in accordance with the government promotion policy, such as community waste, Pracharat biomass power plant.
6. The solar power projects of the public sector can generate 100 megawatts of electricity per year for 10 years with a total of 1,000 megawatts. The project has started from the year 2019 onward.
7. A new PDP plan will be reviewed every 5 years or when there are significant changes in factors affecting the plan's goals. The power transmission system studies and plans will be put in place to enhance the stability of the electricity system. The power transmission system efficiency in enhanced to be regional grid connection that links to the distribution system in order to further support Grid Modernization.

Risk Factors

1) Business operational risk

1.1 Market demand risk

The main businesses of the company consist of 2 important activities which are energy and ICT.

Energy business is considered to have low risk regarding the market demand. As the company is a contract partner of PEA, which purchases all electricity produced by the company's group according to PPA.

ICT business is in a highly competitive market, especially when bidding for a limited number of large projects in Government sectors against the existing and continually emerging System Integrators in the market. Due to COVID-19 pandemic, the Company places great emphasis on quality of our products and services as well as on maintaining good relationship with our customers, partners, and alliances.

1.2 Potential Risk from the changes of regulations on business operation

The changes of regulations on business operation may affect the business operation of the company either in the positive or negative ways. Such changes are considered uncontrollable factors. However, the company follows up continuously the changes of policy and regulations of the government, and analyzes the company's investments. We pay attention to such changes in order to adapt the company's operational method to be in compliance with government regulations.

1.3 Risk of reliance on major customers for energy business

The group of companies operating power plants in every project has only one customer, which is Provincial Electricity Authority (PEA), and has power purchase agreements entered with PEA. This customer is reliable and stable. Therefore, the risk of reliance on major customers for energy business is low.

1.4 Risk of materials necessary for production

Our subsidiary IEC Sakeaw 1 Co., Ltd. operating biomass power plant, of which the important materials to produce the power are wood chips, wood barks, palm bunches, and bagasse. These are important raw materials for power production. The price and productivity of these natural resources are not certain. Therefore, there is a risk of material shortage in some seasons when the price tends to be higher.

IEC Maetha Mae Taeng Co., Ltd. face the risk of climate change. The sunlight which is the raw material for electricity generation has been changing with climate whereby in the last 2 years, the power plant experienced overcast due to raincloud and dense fog associated with forest fire.

Future Risk

Higher fuel cost for biomass power plant due to increased number of power plant, resulting in scrambling for resources, pushing the price up. IEC Sakeaw 1 has prepared to produce its own firewood supply in order to control the cost of electricity generation.

1.5 Risk of Solar Power Business**1.5.1 Raw Material Quality**

Sunlight intensity, unfortunately, cannot be controlled.

1.5.2 Raw Material Consistency

Solar collection cannot be consistently controlled or quantified in hours due to the fact that the raw material consistency changes with the climate.

1.5.3 Selling Price

The buying price of electricity is given adder subsidy by PPA for 10 years. Subsequently, the Buying price will be subject to the change in government's policy in the future.

1.6 Risk of Interest Rate

The risk of interest rate refers to the risk of interest rate change in the future which may impact the business operation and cash flow.

The Company is exposed to interest rate risks relating to deposits from financial institutions, loans, overdraft, and short-term and long-term loans because the Company used both short- and long-term lending sources, mainly with floating interest rates. This makes it vulnerable to interest rate fluctuations. However, the Financial Management Division monitors the public sector's financial policies and market conditions closely to be used to manage risks and mitigate business financial impacts. As for risk management, the Company will control the interest rate, assets and debts of the entire group of companies to be more consistent and suitable.

2) Risk of investment of shareholders**2.1 Risk affecting the right or investment of shareholders**

The Company has many minority shareholders, which as of 12 October 2022, there is 26,658 shareholders. From that number, in order to hold a meeting of shareholders, one-third or 33.33% of shareholder votes are required to declare meeting that constitute a quorum open. Therefore, there is a risk to the shareholders that the Company might not be able to hold a general meeting that constitute a quorum on the first occasion.

The Company has no major shareholder with more than 15% of all subscribed shares and therefore has no major shareholder who hold sways over the Company and influence its decision.

Risk of conflict of interests from executives and major shareholders having competing business: (None)

Organizational Structure

Board of Directors

Authority and Duties of the Board of Directors

The Board of Directors has the authority to manage the Company in accordance with the objectives and articles of association as follows.

1. The Board of Directors must organize a meeting at least once in every 3 months.
2. The Board of Directors has the authority to issue regulations in order to carry out the objectives of the Company.
3. The Board of Directors shall provide the shareholders' annual general meeting.
4. The Board of Directors must provide a balance sheet and income statement as at the end of the financial year of the Company and propose to the shareholders in the annual general meeting.
5. The Board of Directors may appoint any other person to carry out the business of the Company under the control of the board.
6. The Board of Directors of the Company is entitled to compensation for their duties.
7. The Board of Directors shall not be allowed to be as a partnership or be a shareholder in any juristic company of the same nature and likely to be Company's competitor, unless otherwise informed in the shareholder meeting of such act prior to the appointment resolution.

Composition and Appointment of Board of Directors

Any member in the Board of Directors must be qualified according to article 68 of Public Limited Company Act B.E. 2535 and on the subject of requirement of Capital Market Supervisory Board determined regarding Securities and Exchange Act B.E.2535

Structure and Qualification of Board of Directors

1. The Board of Directors shall be composed of directors having different expertise and experience, including specific skills that lead to Company's benefit. At least one person who is non-executive committee in business or major industry that the company is operating must be appointed. The Company shall declare the policy regarding composition of the Board of Directors, including term of each directors in the annual report and on the Company website. The announcement shall not be against the Public Limited Company Act.
2. The Board of Directors must be composed of at least 5 and more than half of them must reside in the Kingdom.
3. It must be composed of independent directors as determined by SEC regulation. For the non-independent directors should be fairly appointed as per the proportion of amount invested of each shareholder group.

4. Directors must have a variety of skills; industry, accounting, finance, business, management, strategic risk analysis, law, corporate governance. At least 3 of all directors must have a knowledge directly related to business management of the Company and at least 1 director must have expertise in knowledge of laws, and at least 1 director for accounting and finance.

5. Appointment of Directors is subject to the terms precisely determined. It must be transparent. The profile of directors with sufficient details shall be disclosed in annual report for a decision making in shareholder's general meeting.

6. They must appoint a company secretary to be responsible for providing advice on laws and regulations that the Board need to know, and operating their activities, including cooperation to respond the resolution of the Board of Directors, and other duties according to the laws of Securities and Stock Exchange of Thailand. The Company provides trainings to develop the knowledge of laws, accounting or secretarial duties to company secretary from time to time.

Board of Directors as in 2022 are composed of following members.

Name	Position	Remark
1. Mr. Komol Jungrungrangkit	Chairman	
2. Pol.Maj.Gen Somnuk Burame	Director / Chairman of the Audit Committee	Since 17 May 2021
3. Mr. Chalerm Suepugdee	Director / Audit Committee	Since 17 May 2021
4. Mr. Sakda Sinives	Director / Audit Committee	
5. Mr. Pornthep Itsoponpun	Director	
6. Ms. Ploykarin Sujjavata	Director / Chief Executive Officer	Since 26 April 2021 Since 10 November 2021
7. Mrs. Chanidapa Wanicharoensuk	Director	Since 26 April 2021
8. Mr. Polsan Teowsomboonkij	Director	Since 11 August 2021

Two authorized directors jointly sign to bind the company and affix the company's seal. The company secretary in year 2022 is Mr. Supanut Poonsawasd.

Meetings of the Board of Directors

Meeting of the Board of Directors is scheduled at least once in every three months or called when it's necessary. The Meeting agenda must be set in advance and consider to follow up the operation result regularly. Prior

to the meeting date, the Company Secretary will send the notice of meeting invitation, including agenda and documents so that the Board of Directors have enough time to study the issues before the meeting. The Company Secretary takes the minutes of meeting, store the minutes that have been approved by Chairman of the Board or an appointed director as well as to have it ready for inspection from directors or relevant persons. In 2022, there were 8 meetings organized. The summary of attendance of each director is as follows:

Name of Attendees	Attendance / Total Meeting sessions during their duty (Times)
1. Mr.Komol Jungrungruangkit	8/8
2. Pol.Maj.Gen Somnuk Burame	8/8
3. Mr. Chalerm Suepugdee	8/8
4. Mr. Sakda Sinives	7/8
5. Mr. Pornthep Itsoponpun	8/8
6. Ms. Ploykarin Sujjavata	8/8
7. Mrs. Chanidapa Wanicharoensuk	8/8
8. Mr. Polsan Teowsomboonkij	8/8

Performance Evaluation of the Board of Directors

According to the principles of good corporate governance of the Company, it is determined that the Board of Directors or Sub-Committees must proceed a performance evaluation at least once a year. The evaluation is composed of overall performance and performance of each director. The purpose is to improve the working process for more efficient performance. The Company gives the importance to self-evaluation of Board of Directors, orientation of new directors and encourages the directors to attend the training provided by Thai Institute of Directors Association (IOD) and related authorities from time to time.

The purpose of evaluation of the Board of Directors and Sub-Committees of the Company is to have a transparent and fair performance for a good corporate governance to promote the Company sustainable growth and progress.

The Process of Evaluation of the Board of Directors

To ensure that the principle of good corporate governance is complied with and the information is thoroughly, quickly and accurately distributed among the company directors in a straightforward manner, the Company uses a self-

assessment form of Board of Directors for the year 2022 based on the Stock Exchange of Thailand's self-assessment form. The Company regularly perform self-evaluation for Board of Directors annually. The results will be used as a framework for reviewing performance, problems and obstacles as well as further improve work performance. Therefore, self-evaluation for the Board of Directors in 2022 were conducted.

The form includes the following major topics for evaluation:

- Board structure and qualifications
- Roles, duties and responsibilities of the board
- The board meeting
- Duties of directors
- Relationship with management
- Director's self improvement and management training

In each topic, there were sub-topics for the directors to rate. The scores obtained were calculated to get an average score of Board of Directors, Sub-Committees, and each director. In the year 2022, with the overall evaluation, the majority of the committee agreed that the result was good. Comments were also taken into account in order to improve performance of the Board of Directors as well as further enhance the Company's operation.

Executive Management

Executive Management as of 2022 are:

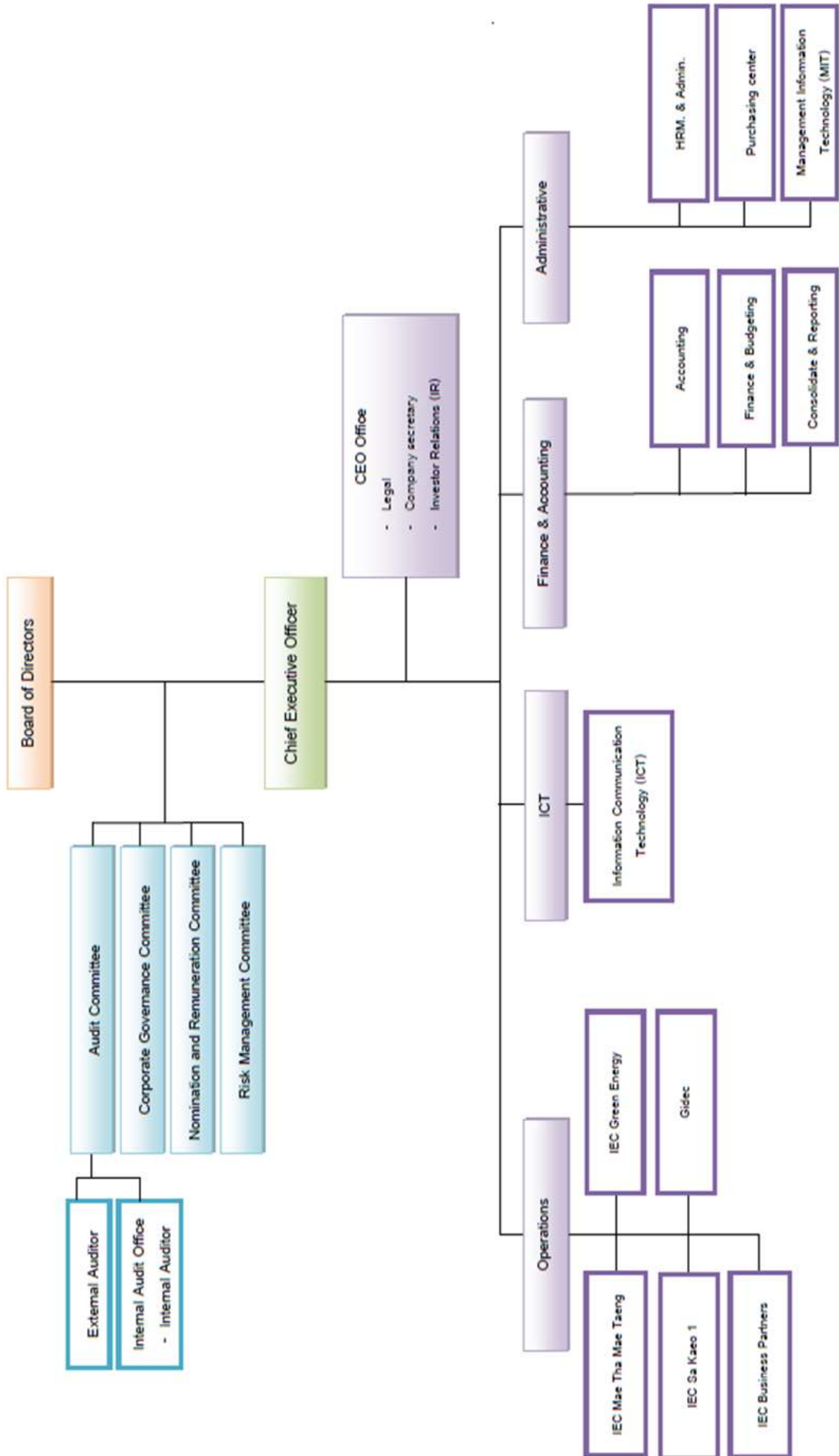
Name	Position	Remark
1. Ms. Ploykarin Sujjavata	Chief Executive Officer	
2. Ms. Thitirat Kuanun	Chief Financial Officer	Since 1 March 2021
3. Ms. Duangjai Nilapan	Executive Vice President - ICT	

Company Secretary

Company Secretary as of 2022 is:

Name	Position	Remark
Mr. Supanut Poonsawasd	Company Secretary	

The International Engineering Public Company Limited Organization Structure



Remuneration for Board of Directors and Executives

1. Financial Remunerations

1.1 Remuneration for Board of Directors in the year 2022 are composed of

No.	Name	Board of Directors	Audit Committee	Risk Mgt. Committee	Nomination Committee	TOTAL
1	Pol.Maj.Gen Somnuk Burame	100,509.09	3,000.00	-	-	103,509.09
3	Mr. Chalerm Suepugdee	100,509.09	3,000.00	-	-	103,509.09
4	Mr.Sakda Sinives	87,945.46	3,000.00	-	-	90,945.46
5	Mr. Pornthep Itsoponpun	100,509.09	-	-	-	100,509.09
6	Ms. Ploykarin Sujjavata	100,509.09	-	-	-	100,509.09
7	Mrs. Chanidapa Wanicharoensuk	100,509.09	-	-	-	100,509.09
8	Mr. Polsan Teowsomboonkij	100,509.09	-	-	-	100,509.09
	TOTAL	691,000.00	9,000.00	-	-	700,000.00

Remark : Meeting allowances for Board of Directors and Audit Committee was approved by the Annual General Meeting of Shareholders year 2022 dated 28 April 2022 to not exceeding 700,000 baht.

1.2 Compensation for Executive Officers

In 2022, the company made compensation of 1,500,000 baht to 1 executive officer. (Provident fund and other benefits not included)

2. Other compensation

New executives beginning their tenure from September 2017 will not be provided a provident fund. The company however has provided provident fund to the executives who began their tenure prior to September 2017 at the rate of 3% of monthly compensation. In 2022, the company has not given a provident fund to executive.

Employees

- As of 31 December 2022, IEC has the total of 13 employees.
- Labor disputes
-None-

- Remuneration Management

The company formulated the policy of remuneration and employee benefits in accordance with employees' responsibilities and performance, including economic condition and company's performance. The remuneration is divided into three following categories:

1. Salary: IEC defines the suitable rate based on duties and responsibilities in its salary structure.
2. Welfare: IEC provides the following welfare for the employees:

- 2.1 Social security Fund

IEC provides social security fund as indicated by law. It offers the protection under seven circumstances, namely sickness, labor and delivery, disability, death, child support, retirement and unemployment. The company also offers Workmen Compensation Fund (WCF) to employees who are injured on duty.

- 2.2 Provident Fund

This welfare promotes the employees' savings. IEC deducts 3% of their salary as contribute to provident fund and the company will contribute an equal amount to the fund as well.

- 2.3 Medical Welfare

IEC applies for health insurance to support the medical expense in time of employees' sickness and the rate varies according to the employee's position.

- 2.4 Group Accident Insurance

IEC provides the employees with group accident insurance, whose coverage varies according to the employee's position.

- 2.5 Compassionate Allowances

IEC offers compassionate allowances in case the employees or their family members pass away.

3. Bonus

IEC offers bonus based on the employees' and company's annual performance.

- Human resource development

Deeming the employees as the organization's most valuable asset, IEC always recognizes the significance of human resource development. It therefore provides them with several activities from the first day the employees join the company such as employee orientation, training, job study/field visit, job rotation and promotion, etc.

In 2022, the Company has arranged for employee training programs in order to develop occupational skills such as finance, accounting, legal, staffing, investor relations, IT and engineering.

The employees of the Group spent about 6 hours/person/year on training and IEC employees spent 3 hours/person/year on average.

Corporate Governance

Corporate Governance Policies

IEC and subsidiaries formulate the corporate governance policies based on the authorities.

The Sub-Committees

The company constitutes 6 following sub-committees:

1. Executive Committee
2. Audit Committee
3. Nomination and Remuneration Committee
4. Risk Management Committee
5. Corporate Governance Committee
6. Investment Committee

The Board of Directors' Meeting No.3/2020 dated 10 April 2020 has resolution to appoint Investment Committee to present and scrutinize any projects or approve for securities investment in the Stock Exchange of Thailand (SET50 / SET100) within the approved budget by the Board of Directors and further report for acknowledgement.

1. Executive Committee

Authorities and Responsibilities of the Executive Committee

The Executive Committee is authorized to conduct activities as assigned by the Board of Directors according to the company's objectives and article of association.

1.1 Operation authority , approved by the Board of Meeting no. 2/2018 dated February 26, 2018

was summarized as follows :

- Money deposit with financial institutes
CEO : Over 5,000,000 baht
- Loan limit for subsidiaries
CEO : Not greater than 50,000,000 baht

- Approval for opening overdraft and loan limits
CEO and inform the Board of Directors acknowledged : Not greater than 100,000,000 baht
- Approval for procuring fixed assets, other items, supplies, raw materials for production process, and supplies in production process (extra items from annual business plan)
CEO : Not greater than 50,000,000 baht (per approval)
Board of Directors : Over 50,000,000 baht
- Approval for procuring fixed assets, other items, supplies, raw materials for production process, supplies in production process (Items extra from but aligned with annual business plan)
CEO : Not greater than 50,000,000 baht (per approval)
Board of Directors : Over 50,000,000 baht
- Filing/not filing a lawsuit, or appealing/not appealing, or not petitioning to the supreme court, or withdrawing the case/appeal/petition to supreme court on tax, compromising, or giving consent to pay tax
Executive Vice President of Accounting and Finance : Not greater than 2,000,000 baht /case
CEO : Not greater than 10,000,000 baht /case
Board of Directors : Over 10,000,000 baht /case
- Approval for investment and expense of IEC business in addition to the indicated amount or the company's budget for general transactions

Within-Budget:

- Not greater than 5,000 baht Senior Division Manager
- Not greater than 10,000 baht Vice President
- Not greater than 25,000 baht Senior Vice President / Asst.Vice President or General Manager /
Managing Director of subsidiaries
- Not greater than 50,000 baht Senior Executive Vice President / Senior
Vice President (in specific departments)
- Not greater than 5,000,000 baht CEO
- Over 50,000,000 baht Board of Director

Over-budget or Off-budget:

- Not greater than 50,000 baht Managing Director of subsidiaries / Senior
Executive Vice President (in specific departments)
- Not greater than 5,000,000 baht CEO
- Over 5,000,000 baht Board of Director

2. Audit Committee

Authorities and Responsibilities of the Audit Committee

Audit Committee has the following scope of duties and responsibilities and is required to report to the Board of Directors:

1. To review and ensure accuracy and adequacy of the financial report
2. To review and ensure the appropriateness and efficiency of internal control and internal audit
3. To regularly review the company's compliance with securities and exchange laws, SET regulations, and relevant laws
4. To consider, nominate, dismiss, and recommend remuneration scheme of External Auditor
5. To consider, nominate, dismiss, and recommend remuneration scheme of Internal Auditor
6. To ensure accurate and complete disclosure of the company's information related to connected transactions or conflict of interest
7. To produce an Audit Committee Report as a part of the company's annual report
8. To perform any other duties as assigned by the Board of Directors under the Audit Committee's prior consent.

In 2022, the Audit Committee consists of:

Name	Position	Remark
1. Pol. Maj. Gen Somnuk Burame	Chairman of the Audit Committee	Since 17 May 2021
2. Mr. Chalerm Suepugdee	Audit Committee	Since 17 May 2021
3. Mr.Sakda Sinives	Audit Committee	

3. Nomination and Remuneration Committee

Authorities and Responsibilities of Nomination and Remuneration Committee

1. To consider the criteria and procedure in selecting qualified person (s) to assume the office of directors
2. To determine qualifications of nominated director (s) in writing or set out nomination practices and guidelines
3. To consider the shareholder (s) if that person (those persons) has all of the right qualifications to be nominated as director(s)
4. To review and screen the nominated candidate (s) to ensure that person's qualifications meets legal and governmental requirements
5. To select person (s) based on nomination procedure and to propose opinions to the Board of Directors, who shall further propose the name in general meeting of shareholders for appointment.

6. With approval of the Nomination Committee, to perform any other duties as assigned by the Board of Directors
7. To consider and review remuneration scheme and criteria for directors and executives. The scheme will be submitted to the Board of Directors, who approves the remuneration of executive. For the directors' remuneration, Board of Directors will propose it in the general meeting of shareholders for approval.
8. To consider and review the peers' remuneration scheme
9. To review and revise remuneration scheme to be appropriate and realistic
10. To consider evaluation criteria of director(s) assuming office of executives and propose to the Board of Directors
11. To consider annual remuneration scheme

4. Risk Management Committee

Authorities and Responsibilities of Risk Management Committee

The Risk Management Committee has duties and responsibilities and reports to the Board of Directors as follows:

1. Consider the risk management and control the business risk for an appropriate investment and operation.
2. Report the result of risk management to the Board of Directors, and, in case of important factors and events which may significantly impact to the company, immediately report to the Board of Directors for a quick response.
3. Consider other matters related to the risk of the company as assigned by the Board of Directors.

5. Corporate Governance Committee

Authorities and Responsibilities of Corporate Governance Committee

Corporate Governance Committee has duties and responsibilities and reports to the Board of Directors as follows:

1. Suggest policy of good corporate governance and establish guidance for a good operation and corporate governance.
2. Review good corporate governance principles to be in accordance with international standards, adjust the principles as appropriate.
3. Follow up the operation performance and report to the Board of Directors.

6. Investment Committee

Authorities and Responsibilities of the Investment Committee

1. To study and analyze opportunities, define strategies, goals, investment plans, investment budgets, return on investment and other benefits from investment taking into consideration the worthiness of investment as well as related risk factors that have to be managed to an acceptable level.
2. To inspect, monitor and evaluate the approved investment results to be within the approved budget and report to the committee for acknowledgment.

Nomination and Appointment of Directors and Management

(1) Independent Directors

Criteria of Selection of Independent Directors

The qualification of independent directors is as follows.

1. Being not an employee nor consultant who receives regular salary or other benefits from the company; either its headquarter or subsidiaries, affiliates or related companies.
2. Being not related by blood or legal registration as father, mother, spouse, siblings, children, including spouses of siblings of children, the children of executives, major shareholders or powerful shareholders.
3. Hold less than 1% of paid-up shares of the company; either its headquarter or subsidiaries, affiliates or related companies, including shares held by related persons.
4. Being able to take care of the interests of every shareholder equally.
5. Being able to prevent conflicts of interest between the company and directors, major shareholders or other companies whose executives or major shareholders are of the same group.
6. Being able to attend the meeting of Board of Directors of the company to decide the important activity of the company. The previous qualifications is the same as the minimum requirements of SEC and The Stock Exchange of Thailand.

Balance of power between Independent Directors

The Board of Directors of the Company as of 31 December 2022 consists of 8 members as follows:

Executive Directors	2	persons
Non-Executive Directors	3	persons
Independent Directors	3	persons

(2) Nomination of Directors and Management

The selection of individuals to be appointed as directors depends on discretion of Nomination committee, the Board of Directors and in accordance with the company regulations. The retail investors shall have the right to nominate the directors through the vote in the shareholders' meeting. Each shareholder shall have one vote per one share and may use all the right to vote for one or several individuals to be company director(s). However, the voters cannot split their right to several candidates, i.e. cumulative voting is not used in the vote. The candidate receiving the most vote and ones in following ranks shall be nominated as per the number of directors required in that vote. In the case where the candidates have equal votes and the equal ranks exceed the number of directors required, the president of the meeting shall cast a final vote.

If the position of director becomes vacant due to the reason other than the termination of regular terms, the Board of Directors shall nominate an individual whose qualification is in accordance to the law to be as a director in the next meeting. If the remaining term is less than two months, the director who takes the vacant position shall be in the position only within the remaining term.

The selection of executive officers who are not directors shall be at sole discretion of the Board of Directors.

Operation control of its subsidiaries

1. Mechanism for the operation control of subsidiaries.

The meeting of Board of Directors no. 18/2017 deliberates the resolution to modify the operation authorities which are regulations on approval system of company and subsidiaries, effective on 25 August 2017. The authority to act on behalf of the company is of The Board of Directors, unless otherwise consented by the Board of Directors to other individuals. The authority of general administration is given by managing director. The authority of approval in the work process can be classified in 8 categories; finance, administration, purchasing, human resources, general affairs. Later, the meeting of Board of Directors no. 2/2018 deliberates the resolution to modify the operation authorities since 26 February 2018 which is effective until now.

Furthermore, individuals elected to be as members in subsidiaries Board of Directors of affiliate Company shall ensure that the affiliate company has complete and correct regulations on the acquirement, the discharge of assets or other important matters of such company, including the information disclose as same as the headquarter company, information storage, accounting reports ready to be inspected and can be gathered to make a financial statement on time.

2. Information and agreement between companies and other shareholders regarding administration in subsidiaries

-None-

Control of internal information use

The company has policies and measures to prevent unfair advantages over other shareholders and promoting equal treatment for all shareholders by not misusing the information including using inside information for their own gains such as purchasing stock. This is due to following measures established by the Board to prevent insider trading by any involved persons including directors, executives and employees in the information-related department including their spouses and minors.

- Involved persons are restricted from trading the company's stock during one-month period before the disclosure of quarterly and annual financial statements as well as at least one day after the disclosure.
- Employees who acknowledged any information which is at that moment still not disclosed to public and may affect the stock price must strictly refrain from purchasing or selling company's stock until the information is disclosed to public.
- Directors and high-level executives (from executive vice president upward including financial and accounting division executives) are obligated to report their shareholding upon assuming their office initially or after every change (purchase, sales or transfer) therein within 3 working days to the Office of Securities and Exchange Commission or report their holding for the Board of Directors' Meeting's acknowledgement every time the meeting is convened.
- Set up workplace security system to secure confidential files and documents.

Audit Fees

At the 2022 Annual General Meeting of Shareholders on 28 April 2022, the shareholders' meeting passed a resolution to appoint the auditor of NPS Siam Audit Company Limited to be the Company's auditor for 2022 as well as approved the Company and its subsidiaries audit fees for 2022 in the amount not exceeding 3,400,000 Baht per year (three million and four hundred thousand Baht only).

Compliance with other Principles of Good Corporate Governance

The company is determined and committed to operate the business while focusing on the preservation of shareholders' interests and responsibility to every group of stakeholders by continually adheres to the Thailand Stock Exchange's Principles of Good Corporate Governance for Listed Companies and use it as a guideline for company's operation and preservation of shareholders' interests. The principles of good corporate governance are detailed in the 5 following sections:

(1.) Rights of Shareholders

The company has policies to support and promote fundamental rights for every shareholder through widely-accepted and reliable measures and standard, entitling the shareholders to freely purchase, sell and transfer their assets, attending the meeting of shareholders or assign a proxy to attend the meeting, vote and express opinions in their stead freely, submit their questions prior to the meeting, freely express their opinions in the meeting and exercise their rights to vote on important matters proposed by the Board for shareholders' approval such as the appointment of directors with expiring tenure, amendment of the memorandum of association and fixing remunerations for directors and auditors etc. In addition, the company also ensure that other processes are in compliance with rules and regulations of the Stock Exchange of Thailand such as the provision of significant information that may affect the company or the shareholders such as connected transactions, exercising of warrants, acquisition and disposal of assets of significant size as per the related regulation through SET's ELCID and the company's website.

(2.) Equitable Treatment of Shareholders

The company understands and values the rights of shareholders. In order to ensure equitable treatment for every shareholder, the company set the following measures to protect the right of shareholders:

1. Shareholders' meeting

Information provided to shareholders prior to the meeting

1.1 The company has a policy to support or promote every group of shareholder group, especially institutional shareholders to attend the shareholders' meeting. The company shall send out the meeting invitation which indicates time and venue of the meeting, including the agenda to shareholders. The detailed explanations and reasons for a consideration of the agenda shall be stated in Notice of Annual General Meeting and Extraordinary General Meeting of Shareholders.

1.2 For shareholders' meeting, the company shall organize a suitable venue that all shareholders can attend. The meeting program and duration shall be appropriate to the agenda. We also encourage the shareholders to submit their question related to the company before the meeting as we have clearly set the instruction of question submitting. The company will inform of the question acceptance at the same time that the shareholders' meeting invitation is sent. Furthermore, the company has announced the criteria of the question to be submitted as an agenda of the meeting the on the company website.

1.3 The retail shareholders shall propose the candidates' name for a selection of directors before the Annual General Meeting of shareholders as per the nomination regulation of the company.

1.4 The company shall facilitate for the shareholders to exercise their right of meeting attendance and vote, and avoid any actions that may hinder their attendance. For example, the voting process in the meeting shall not be overly complicated or costly and the venue of the meeting must be convenient for the shareholders to attend.

1.5 The company shall protect the right of each shareholder and treat them equally. The shareholders shall be entitled to company's information both in Thai or English.

1.6 The company has delivered the notice of annual general meeting of shareholders containing the agenda of the meeting with a detailed explanation and reasons for consideration of the agenda for the shareholders prior to the meeting of shareholders at least 14 days.

1.7 Protection of the retail shareholders' rights

The company encourages retail shareholders to propose an agenda prior to the meeting of shareholders or nominate nominees at least 45 days prior to the meeting date. The addition of meeting agenda or proposal of nominees to be a director shall be in accordance with the law and regulations of the company.

1.8 Stakeholding directors

The company has a policy to prevent the directors who are also stakeholders involving the subject of any agenda from participating in the consideration of such meeting agenda.

2. The operation on the day of shareholders' meeting

2.1 The company encourages the meeting organizers to make use of technologies for to facilitate the processes in shareholders' meeting including shareholder registration, vote counting, scoring result so as to have correct and accurate information and fast meeting.

2.2 All directors including members of sub-committees and the company secretary shall attend the meeting every time including independent legal advising inspector who shall oversee that the meeting proceeds transparently and lawfully. Should they do not have important duty on such days, the executive officers shall attend the shareholders' meeting to answer the questions as well.

2.3 All shareholders are entitled to attend the shareholders' meeting. During the meeting sessions, the shareholders shall have the right to question or propose an idea to the meeting according to the agenda. The chairman shall allocate the time appropriately to encourage the attendees to propose an idea and question in the meeting.

3. Post-meeting procedures

3.1 Preparation of the meeting minutes and disclosure of shareholders' meeting resolutions

In the minutes of shareholders' meeting, the company shall process the report, voting process and announcement of voting results for the meeting's acknowledgement before the meeting session, including the question time for shareholders. The meeting shall also have a record of questions, answers and voting result of each issue which includes the number of votes that agree or disagree with the issue as well as abstention. The name of present attendees including the name of absent directors in each meeting shall also be recorded.

3.2 The company secretary shall prepare a complete, correct and clear meeting minutes for submission to Securities and Exchange Commission (SEC) as well as disclose to the shareholders about the voting results of each

agenda in the company's annual and extraordinary general meeting of shareholders through the company's website within 14 days from the date of meeting.

(3.) Roles of Stakeholders

The company has established policies and measures towards each different group of stakeholders and is aware of and respect legal rights and agreements of all stakeholders with company's employees at all levels obligated to perform their duties in accordance to the measures as follow:

1. Determination of policies regarding the treatment of stakeholders

1.1 The company divided the stakeholders into different groups; shareholders, business partners, customer, employees, cooperators, debtors, creditors, community and related governmental or private authorities. The company created communication channels to response the request of such groups sufficiently.

1.2 The company has the commitment to take care of our customer systematically in terms of health, safety and remuneration that may be requested during the use of products or service.

1.3 The company established the corporate social responsibility to build a positive relationship with the community where the company is located. We have plans of environmental preservation and safety and avoid making the impact to the environment which is caused by the operation. The company has the remuneration plan in case of accident and has plans to solve the problem sustainably. Besides, we use European standard in the construction of the plant to ensure that the supply chains of the company is environmentally friendly and the materials are used efficiently.

1.4 The company has a measure of the fair treatment and responsibility to the creditors by an appropriate guarantee to the creditors according to business agreements and a good business practice.

1.5 The company has signed a partnership against corruption and encourage our employees to be aware of the importance of this. Besides, we have organized and promoted activities to cultivate our employees to work in compliance with the laws and related regulations.

1.6 The company gives the importance to fringe benefit of our employees. The employment contract is based on fairness. They will be given remuneration appropriate to their ability in order to motivate them to dedicate themselves to the organization. The company has established safety measures to ensure a good working environment and organized activities to make our employees respect the working disciplines. All employees shall be taken care of equally. Furthermore, the company has conceived plans to solve the problems that leads to the termination of employment by any reason.

1.7 In order to ensure an equal treatment of all stakeholders and that the operation is in accordance with the principle of good governance, we have created a communication channel to receive complaints or requests, including opinions and suggestion that the stakeholders think it may lead to a negative impact to themselves or other

stakeholders due to the business operation, misconduct of employees, or any action that is likely to be a corruption or unequal treatment of stakeholders, including negligence or lack of prudence. The stakeholders may inform the company through the company website. The company will inspect the case as per our measure and record all progress in writing. The name of the informer shall not be disclosed and the complaint shall be kept confidential to protect the informers and prevent the impact that may occur to them.

2. The selection of business partners

2.1 The duration that the company receives the products for a test must be limited and shall return the material for testing to the business partner/ seller immediately when the test period is terminated. The test must be carefully made so as to efficiently prove its quality and competency. All test process shall be recorded in writing to be as the reference for consideration when necessary.

2.2 The company shall not invite business partners/ sellers to bid when such product or service is not necessarily required. The qualification, dedication and ability of sellers shall be considered and the company shall invite only selected sellers for a bid with the expectation to use the product or service of the seller who wins the competition.

2.3 All bidders shall be treated equally by the company.

2.4 All information on price quotes or bidders shall be kept confidential.

2.5 The company shall perform a bid with transparency, fairness and honesty. There shall not be any unfair influence interfering with our consideration.

3. Business operation under environment standards

The company controls its emission of wastes in strict compliance with the regulations set by the Pollution Control Department, Ministry of Natural Resource and Environment. IEC's power plants consistently monitor pollution level and control the discharge of industrial wastewater in addition to regularly submitting reports in adherence to the government agencies' regulations.

4. Disclosure and Transparency

The Board of Directors shall be responsible for a complete, correct and on-time disclosure of information on finance and other matters through communication channels of stock market according to the Annual Report (form 56-2) and other channels such as the company website. The information is presented in English and Thai and shall be always updated.

In 2022, the company disclosed the information through the company website and answered inquiries by investor relations services by phone, providing more channels to swiftly and accurately disclose the company's information for investors, shareholders and stakeholders.

5. Responsibilities of the Committees

The Board has an important role as the representative of shareholders in setting vision, mission, plans and budget in order to achieve the operational goals as well as ensuring that the executives' operation is in compliance with the set policies and performed with fairness, transparency and in accordance with related laws, regulations, policies and business ethics.

Information about the Directors, Executives, Controlling person and Company Secretary

Name/Surname	Title / Date Appointed	Age (Years)	Educational background	Share-Holding (%)	Past 5 Years work Experience		
					Period	Title	Company/Business
Mr. Kernal Jangyunguangkai	Chairman and Director	71	Mathayom 3, Wat Hua Lamphong School	10.34	2017 - Present	Chairman of the Board / Director	International Engineering Plc.
					2011 - Present	Honorary Advisor	AgriPac Holdings Plc.
Mrs. Phiyakorn Sugawata	Director / Chief Executive Officer Appointed as Director in accordance with the resolution of the 2021 Annual General Meeting of Shareholders dated April 26, 2021 Appointed as Chief Executive Officer by the resolution of the Board of Directors Meeting on 10 November 2021	56	Bachelor of Business Administration, Sam University	-	1979 - Present	Chief Executive Officer Chief Executive Officer Chief Executive Officer Chief Executive Officer Chief Executive Officer	Sarmmit Foodwear Co., Ltd. Sarmmit Pinehurst Golf Club Co., Ltd. Pondus Willa Co., Ltd. Sarmmit Star Home Co., Ltd. Ruamjai Pattana Kwanroo Co., Ltd. Ruamjai Pattana Foundation
					2021 - Present	Honorary Advisor	River Kwai International Food Industry Co., Ltd.
						Honorary Advisor	Chiang Rai Frozen Food Co., Ltd.
						Honorary Advisor	Qualimer Co., Ltd.
						Honorary Advisor	Agri Fresh Co., Ltd.
						Director	International Engineering Plc.
						Chief Executive Officer	Sarmmit Foodwear Company Limited
						Managing Director	Sarmmit Pinehurst Golf Club Company Limited
							Pondus Willa Company Limited.
							Maple Property Company Limited. River Kwai International Food Industry Company Limited and Agri Fresh Company Limited
Mrs. Chanidapa Wanichhansensak	Director Appointed as Director in accordance with the resolution of the 2021 Annual General Meeting of Shareholders dated April 26, 2021	36	Bachelor of Aviation Technology (Airport Management), Chulachok, Bangkok. Master of Business Administration in Marketing, Ramkumbhojng University.	-	2021 - Present	Head of Product Development Division	International Engineering Plc.
					2017 - present		Sarmmit Foodwear Company Limited (manufacturer and distributor of Aerosoft shoes)

Name/Surname	Title / Date Appointed	Age (Years)	Educational background	Share-Holding (%)	Past 5 Years work Experience		
					Period	Title	Company/Business
Mr. Prudhup Biscepan	Director	40	Bachelor of Commerce with a Major in Accounting, Macquarie University, Sydney, Australia	0.015	2009 - 2011 2011 - 2016 2011 - Present 2016 - Present 2014 - Present 2014 - Present 2017 - Present	Accounting Manager Managing Director Executive Director Executive Director Chobhari YBC Member Member Director	Pink Chili Limited Partnership, Laifield, Sydney, Australia SRF Property Company Limited (Bangsam commercial building and construction development project, Mueang, Chobhari) 200 units of Seven Place-affiliated Apartments Seiamak Property Co., Ltd. (Townhouse and commercial building projects in Sri Racha District, Chon Buri) Young Entrepreneurs Chamber of Commerce for Chobhari Member Network and Business Development and Sustainability Program Member of Chobhari Chamber of Commerce International Engineering Pte.
Mr. Salda Sinwan	Director	68	Bachelor of Agriculture and Cooperatives, Subdoloh, Samarabak Open University Master of Science Rural Development, Central Luzon State University, Philippines.	-	2017 - Present 2011 - Present 2008 - Present 1978 - 2013	Director / Audit Committee Audit Committee Level QA Specialist Agricultural Specialist	International Engineering Pte. AgriPure Holdings Pte. The quality of agricultural Products Department of Agricultural Extension Bureau of Agricultural Product Quality Development, Department of Agricultural Extension
Mr. Polan Teewaraboonki	Director (appointed as Director in accordance with the resolution of the Annual General Meeting of Shareholders No.472521 dated August 11, 2021)	40	Bachelor of Business Administration (Finance), Thammasat University	0.027	2021 - Present Present	Director Director	International Engineering Pte. Bhuanasom Company Limited (selling agricultural products)

Name-Surname	Title / Date Appointed	Age (Years)	Educational background	Share Holding (%)	Past 5 Years work Experience		
					Period	Title	Company/Business
Prof. Maj. Gen. Somrak Burame	Director / Independent Director (Elected as Director by the resolution of the board of directors' meeting on 31 October 2019)	65	Advanced Police Administration Course Class 31 Master Degree, National Institute of Development Administration, NIDA Bachelor of Law, Ramkhamhaeng University	-	2021 - Present 2019 - Present 2016 2014	Audit Committee Chairman Director Commander of the Administrative and Civil Litigation Division, Office of Law and Litigation Commander of the Provincial Police Region 2	International Engineering Plc. International Engineering Plc. National Police Agency National Police Agency
Mr. Charern Saeppasuee	Director	65	Bachelor of Engineering, Production Engineering Department King Mongkut's University of Technology Thonburi	-	2021 - Present 2020 - Present 1968 - Present 1984 - 1998 1981 - 1983 1979 - 1981	Audit Committee Director Managing Director Technical Department Manager Mechanical Maintenance Department Head Quality Inspection Section Head	International Engineering Plc. International Engineering Plc. C.N.S.P. Co., Ltd. (Distribution of Industrial Chemical) Summit Footwear Co., Ltd. Bosera Co., Ltd. Narong Industry Co., Ltd.

Name-Surname	Title / Date Appointed	Age (Years)	Educational background	Share-Holding (%)	Past 5 Years work Experience		
					Period	Title	Company/Business
Ms. Duangjai Nilapan	Executive Vice President - ICT / 25 August 2017 and Acting Senior Executive Vice President - ICT / 29 May 2018	52	Master of Sciences (Industrial Psychology), Kasetsart University Bachelor of Public Administration, Prince of Songkla University	-	2018 - 2022	Executive Vice President and Acting Executive Vice President - ICT	International Engineering Plc.
					2017 - 2018	Executive Vice President - ICT and Acting Executive Vice President - Management	International Engineering Plc.
					2017 - 2018	Acting Executive Vice President - Management and Acting Senior Vice President - ICT	International Engineering Plc.
					2017	Executive Vice President - Management and Acting Vice President - ICT	International Engineering Plc.
					2015 - 2017	Senior Vice President - ICT	International Engineering Plc.
					2015 - 2015	Vice President - ICT	International Engineering Plc.
Miss Thirawat Jansum	CFO	45	Master degree of Business Administration Branch of accounting Ramkhamhaeng University Bachelor degree Business Administration Branch of accounting Burapha University	-	2021 - Present	CEO	International Engineering PLC
					2015 - 2020	Finance & Accounting manager	MJC Development Co., Ltd. (Major development Group)
					2014 - 2017	Finance & Accounting manager	Inthorn Jewelry (Nakhonratchasima Province)
					2012 - 2014	Finance & Accounting assistant manager	Big C Plc. (Head Office Rajdamri)

Name-Surname	Title / Date Appointed	Age (Years)	Educational background	Share Holding (%)	Past 5 Years work Experience		
					Period	Title	Company/Business
Mr. Suphanat Pichaisawat	Company Secretary	37	Bachelor of Law, Ramkhamhaeng University	-	2017 - Present	Senior Manager - Legal / Company Secretary	International Engineering Plc.

Remark: (1) Family relations between each executive - None -
 (2) IOO refers to Thai Institute of Directors Association
 (3) DA P refers to Director Accreditation Program
 (4) DCP refers to Director Certification Program

Structure of Shareholders

The following table presents a list of major shareholders who own a minimum of 0.5% of total shares as of 21 February 2023 which was the record date (whereby the list of shareholders entitled to attend the 2023 General Meeting of Shareholders was gathered). As of the record date, the Company had 623,363,850 of subscribed shares.

	Name	Surname	Number of Shares	Proportion of Shareholding (%)
1	Mr. Komol	Jungrungruangkit	65,949,125	10.580%
2	Mr. Thidchuan	Nanawarathorn	17,500,000	2.807%
3	Mr. Surat	Itsophonphan	12,506,201	2.006%
4	Mr. Kornchanan	Thananpong	9,822,189	1.576%
5	Mr. Vichit	Chinwongwarakul	5,674,500	0.910%
6	Mr. Manop	Charukamnerdkanok	4,839,316	0.776%
7	Thailand Securities	Depository	4,743,260	0.761%
8	Mr. Veerasak	Boonyaworamethee	3,536,331	0.567%
9	Mr. Sanya	Santayati	3,520,000	0.565%
10	Mrs. Suthatip	Techachakrit	3,008,056	0.483%
		Total first 10 major shareholders	131,098,978	21.031%
		From the total number of Shares	623,363,850	shares

1) Business engagement by holding shares in other companies (Holding Company)

-None-

2) Agreement among major shareholders

-None-

Other Capital Issuance

-None-

Bonds

-None-

Dividend Payment Policy

- Policy of the Company : Unless otherwise necessary and dividend payment has no significant effect on the Company's operation, the Company will pay dividend at the rate of not below 70% but not more than 90% of net profit after tax deduction

- Policy of the Subsidiaries : -Not Specified-

Corporate Social Responsibility

Although the previous year many aspects of the company's operations were affected, the company is still committed to conducting a complete integrated renewable energy business. The Company determines to build an integrated renewable energy business with a main business activity being electricity generation from various forms of renewable energy. It is also a Company's aim to continuously drive business improvements that are in line with the management principles of sustainable development, in order to strike a balance in the areas of economy, society, communities, and environment. Although some businesses are still facing issues with the nearby communities, the Company has invested great effort in resolving the problems, organizing community relation activities, and contributing to activities in the communities, with a desire to see the communities and the business exist and grow together in a sustainable manner.

Furthermore, the Company has been actively engaged in the environmental management by raising awareness within the organization and among the surrounding communities. The Company recognizes a green space development as an important contribution to the goal of restoring balance to the nature, and, therefore, has initiated projects to create green space within the plant area, improve the landscape and maintain the environment around the plant site, and plant trees together with the communities and supporting community activities, etc. During the past year, the company carried out social and environmental responsibility activities as follows;

1. E-Environment : Environmental Impact Reduction

The waste-to-energy power plant at Hat Yai District, Songkhla Province places great importance on the environmental impact of society and, therefore, has taken initiatives to conduct an opinion survey, clarify problems, and implement measures to resolve environmental issues. With the recent problem regarding the foul odour of waste that has affected the surrounding communities, the Company has set out to resolve the issue by spraying enzymes and EM (Effective Microorganisms) to eliminate the odour originating from solid waste collected from Hat Yai Municipality as well as having raised the level of environmental impact prevention measures by taking the following actions:

- Change of Bag Filter to keep pollution level within the standard permissible limit. The system is capable of filtering dust particles of 0.1 micron in size.
- Send data of the Continuous Emission Monitoring Systems (CEMS) measurement data transmission online to Department of Industrial in Songkhla province to check the operation all the time.
- Plant trees mainly in the green area of the project to reduce the odors and sounds around the power plant.

- Spraying the Effective Microorganisms solution (EM) in the operating area once every 12 hours and in rainy season once every 6 hours.

The Sakaeo Biomass Power Plant is determined to operation under the environmental management system, as required by the Company's environmental policy, which focuses on pollution prevention and environmental law compliance. In 2021, the Company conducted an annual environmental risk assessment and decided on action plans to deal with and prevent pollution issues. The environmental investments the Company has entered into are as follows:

- **Production Process Wastewater Collection System** – in the past, there were several point sources of wastewater discharge from the Boiler Zone in the production process. These are Blow down boiler, Sampling, Drain deaerator, and Coolant. Without proper wastewater collection system in place, wastewater ran to the storm water drainage system before being discharged outside the plant area. A wastewater collection system was, hence, constructed to transport wastewater produced as part of the production process to the treatment pond. This approach also helps prevent wastewater from flowing into the storm water gutters.
- **Neutralization Pond Actual 50%** - the environmental assessment revealed that the production process wastewater had a pH value exceeding the wastewater quality standard. A neutralization pond was therefore set up with a chemical system capable of treating wastewater from the production process. The system incorporates 50% sulfuric acid (H₂SO₄) into wastewater to ensure acceptable wastewater quality.
- **Make a dust-break and earthen dykes around the power plant**
- **Tri-party wastewater management and remedy program** for the environment along Phra Prong canal as representative of businesses located near Phra Sathueng river basin in order to participate in tending and preserving the Phra Prong-Phra Sathueng river basin of Sakaeo and Prachinburi province. The Company was assigned to a task force in accordance with Department of Industrial Works' order No.187/2016 Re: Appointment of tri-party task force to manage wastewater and remedy environment problems along Phra Prong canal.

Solar power plant project at Lamphoon province and Mae Malai, Chiang Mai province

- The Company has policy against the use of herbicide to kill weeds, and promote to hire local workers for lawn mowing and allow farmers to mow grass to feed their livestock.
- Regularly conduct water quality test around the projects every year in order to ensure that there is no pollution resulting from energy production.



รายงานผลการตรวจติดตามและประเมินผล
 100% compliance & finding on site collected 2022
 ตุลาคม 2022 - ธันวาคม 4 ถึง 303 ตาราง 4x 102

วัตถุประสงค์
 - รายงานผลการตรวจติดตามและประเมินผล
 - รายงานผลการตรวจติดตามและประเมินผล
 - รายงานผลการตรวจติดตามและประเมินผล
 - รายงานผลการตรวจติดตามและประเมินผล

No.	Item	Compliance (%)			Status	Remarks
		100%	0%	Not		
1	Environmental Impact Assessment (EIA) Report	100	0	100	Compliance	Environmental Impact Assessment (EIA) Report is approved by the Ministry of Natural Resources and Environmental Conservation.
2	Environmental Management Plan (EMP)	100	0	100	Compliance	Environmental Management Plan (EMP) is approved by the Ministry of Natural Resources and Environmental Conservation.
3	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
4	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
5	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
6	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
7	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
8	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
9	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
10	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
11	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
12	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
13	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
14	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
15	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
16	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
17	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
18	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.
19	Environmental Monitoring and Assessment Plan (EMAP)	100	0	100	Compliance	Environmental Monitoring and Assessment Plan (EMAP) is approved by the Ministry of Natural Resources and Environmental Conservation.
20	Environmental Monitoring and Assessment Report (EMAR)	100	0	100	Compliance	Environmental Monitoring and Assessment Report (EMAR) is approved by the Ministry of Natural Resources and Environmental Conservation.



- Mae Malai Power Plant Chiang Mai Province created a Code of Practice (CoP) on measures to prevent, correct and monitor environmental impacts from the power plant for environmental, safety and community protection adjacent to the power plant.



2. S-Social Responsibility and taking part in Community Development

Waste-to-energy Power Plant at Hat Yai District, Songkhla Province

Public relation campaign with the community surrounding the power plant

- Between February 22 and 23, 2022 GIDEC Co., Ltd. in collaboration with officials from Hat Yai City Municipality cleared drainage ditches around the factory to prevent flooding in the area at Village 3 on Sanambin-Lopburi Ramet Road, Khuan Lang Sub-district, Hat Yai District.



- On April 11, 2022, GIDEC Co., Ltd. took part in merit-making activity by buying 20 Red Cross lotteries from the Regional Environmental Office 16 (Songkhla Province).



- On May 28, 2022, employees of GIDEC Co., Ltd. helped plant trees, improve the landscape, increase green spaces and make sound and smell barriers in the project.



- On June 17, 2022, employees of GIDEC Co., Ltd. participated in blood donation to the Thai Red Cross Society in Songkhla Province.



- On December 21, 2022, representatives of GIDEC Co., Ltd. donated money to Radio Thailand, “Lae Ban Lae Mueang”, Prince of Songkhla University Hat Yai Campus to organize a photo exhibition titled “Missing Ton Nga Chang” by exhibiting natural photos.



Solar power plant project at Lumpoon province and Mae Malai, Chiang Mai province

Public relation campaign with the community surrounding the power plant

Religion, tradition and culture

- Supporting the budget for organizing the robe offering ceremony at Ban Doi Yao Monastery.
- Supporting the budget for organizing the robe offering ceremony at Ban Pong Phang Monastery.



- Supporting the budget for organizing Lamphun activities, City of Lanna lanterns.



- Receiving a plaque of honor for doing good deeds and supporting Buddhist operations in 2022.



Education and knowledge development

- Supporting teaching and learning aids by donating printers to Ban Pha Dan School, which is a school to provide an opportunity to hilltribe students received by the abbot of Pha Dan Temple and teachers



- **A study visit center for renewable energy from solar cell:** The Company took part in providing knowledge to students and people, and let government agencies conduct a study tour and inquire about the operation in order to apply knowledge to develop renewable energy to be more efficient. In this photo, teachers and students from North-Chiang Mai University visited the power plant to increase their knowledge. The Company, university and the Provincial Electricity Authority Branch 1 in Chiang Mai Province jointly signed an MOU to install power generation equipment comprising solar panel inverters, as well as relevant materials and equipment at the university to serve as a learning center for students and interested people.





- A learning source for internship students, which accepted electrical students in renewable energy or other fields for internships.



Development and promotion of the quality of life of children and youths

- Supporting the budget for organizing an activity “TO BE NUMBER ONE” for the “Friend Corner” in communities/villages so that people stay away from drugs and providing them a space for creating activities suitable for ages in collaboration with the village headman at Village 6, the Village Committee, children and youths at Ban Tha Kat.



- Supporting the budget of 5,000 baht for organizing a football match “Mae Khanat River Basin Cup”.
- Supporting the budget for sports competition at Tha Kat Village.



- Organizing recreational activities in cooperation with the Beautiful Bird Club in Lamphun Province at Tha Kat Municipal Kindergarten School.



- Help promote children’s day activities.



Public health activities

- An activity to help people affected by the Covid-19 in 2022 by subsidizing a budget for buying rice and dried food worth 60,000 baht (200 sets of survival bags)

Places of operation: Flat land villages, an area under the responsibility of Tha Kat Health Sub-district

Promoting Hospital

Village 1 Ban Thong Fai, Village 2 Ban Phae Yan, Village 3 Ban Doi Chae

Village 4 Ban Muen Khao, Village 5 Ban Ko Sai, Village 6 Ban Tha Kat

Village 7 Ban Na Ha, Village 11 Ban Nong Phueng, Village 12 Ban Nong Bua

Hilltribe villages, an area under the responsibility of Ban Pa Lao Health Sub-district

Promoting Hospital

Village 8, Ban Mae Khanat, Village 9 Ban Pa Lao, Village 10 Ban Pha Dan

Village 13, Ban Doi Kham, Village 14 Ban Pong Phang, Village 15 Ban Mae Sa-ngae

Village 16, Ban Doi Yao

Responsible persons: IEC Mae Tha Mae Taeng Company Limited, Tha Kat Health Sub-district Promoting Hospital, Ban Pa Lao Health Sub-district Promoting Hospital, Tha Kat Sub-district public health volunteers, village headmen and sub-district headmen of Tha Kat Sub-district



Contribution to society and communities

- Promoting local employment, including all positions of employees and workers as well as taking into account human rights, and preparing a complete set of operations in accordance with the safety standard



- Supporting the budget for creating a name plate for Phae Rim Nam Village



Safety and occupational health

- Providing a basic firefighting training, fire evacuation, a theoretical and practical firefighting training course, a theoretical and practical fire-fighting and evacuation drill training course and basic first aid training provided by the Fire Fighting Unit of the Lamphun Town Municipality



- Inspecting fire-fighting equipment



- Supporting the budget for organizing the Civil Defense Volunteer Day at Tha Kat Sub-district Municipality



3. G-Governance

An audit of Quality Management System (QMS) ISO 9001: 2015 was carried out at Lamphun Power Plant and Mae Malai Power Plant to improve their productivity, promote organizational images for sustainable development, enable organizations to produce products and consistently follow legal requirements and relevant regulations to ensure customer satisfaction, create an understanding and avoid problems with communities around the power plants.

- Monitoring via online systems




 BUREAU VERITAS CERTIFICATION

Attestation

Awarded to

IEC MAE THA MAE TAENG CO., LTD.

The above organisation has been audited in accordance with the requirements of the standards detailed below:

STANDARDS

ISO 9001:2015

SCOPE OF SUPPLY

SITE 1	HEAD OFFICE: 333/96, 333/99 RT 3 SQUARE BUILDING TOWER 1, 6TH FL., KAMPHAENGPHET 6 RD., TALAT BANGKHEN, LAK SI, BANGKOK, 10210 THAILAND	BUSINESS MANAGEMENT FOR SUPPORT PRODUCTION OF ELECTRICITY FROM SOLAR CELL OF IEC MAE THA MAE TAENG CO., LTD.
SITE 2	FACTORY LAND 2: 498, 498/1 MOO 6, TAMBOL TAKAD, AMPHUR MAE TA LAMPHUN 51170 THAILAND	GENERATING OF ELECTRICITY FROM SOLAR CELL
SITE 3	FACTORY LAND 4: 9/14, 9/15, MOO 9, TAMBOL KHLEK, AMPHUR MAE TAENG, CHANGMAI 50150 THAILAND	GENERATING OF ELECTRICITY FROM SOLAR CELL

The verification has been completed on 13 September 2022.

IEC MAE THA MAE TAENG CO., LTD.

is proceeding to recommend for certification by Bureau Veritas Certification.

The corresponding file is now under process to our International Certification Centre Office for certification authorisation.

For Bureau Veritas Certification (Thailand) Limited


Chonlida Hakaew
Technical Manager

Bureau Veritas Certification Thailand 16th floor, Bangkok Tower, 2170 New Petchburi Road, Bangkok, Huaykwang, Bangkok 10310
 Tel: (66 2) 670 4800 Fax: (66 2) 718 1940 E-mail: sales.support@bureauveritas.com Website: www.bureauveritas.co.th

- Representatives of the Lamphun Project Power Plant had a meeting with the Local Energy Regulatory Commission in surrounding areas of the power plant to summarize and present various activities of the power plant affecting communities, and listen to comments and complaints received by the Commission in the past to improve and develop a good governance system in promoting the quality of life and preserving the environment around the power plant.



- Mae Malai Power Plant Project in Chiang Mai Province in collaboration with Huai Rai Village Community and representatives of the Energy Regulatory Commission Regional Office 1 (Chiang Mai Province) organized a meeting to clarify the Energy Conservation Fund and elected the Huai Rai Village Fund Committee to use money allocated by the power plant to benefit communities and formulate clear regulations.



Internal Control and Risk Management

1) Opinion of the Board of Directors

The Board of Directors assessed the internal control system of the Company based on information given by the management, and concluded that from the assessment of the Company's internal control of various functions according to the guidelines set in the Internal Control Sufficiency Evaluation Form of the Securities and Exchange Commission, Thailand, covering 5 main sections and 17 sub-principles, the Board deemed the company internal control system can be used to control the operation and needs development in company internal control system to be more efficient.

2) Opinion of the Audit Committee in case of different from the Company's Board of Directors

- None -

Related Transactions

with Direct and Indirect Subsidiaries

1. Transactions with related parties

Related transactions made between the Company and its subsidiaries, direct and indirect, including pricing policy and interest rate applied are as shown in Item 5 of the Note to the Financial Statements Year 2022.

- Related Transactions of subsidiaries, direct and indirect, with their relationships are as follow:

● The International Engineering Public Company Limited	
Direct Subsidiary	Related Transactions
1. IEC Green Energy Co., Ltd.	The Company executed the connected transactions as follows <ul style="list-style-type: none"> ● Income from management fees as per contract in the amount of 120,000 Baht. ● Interest income at the rate 2 percent per annum in the amount of 9,630,288.08 Baht.
2. IEC Sakaeo 1 Co., Ltd.	The Company executed the connected transactions as follows <ul style="list-style-type: none"> ● Income from management fees as per contract in the amount of 330,000 Baht. ● Interest income at the rate 2 percent per annum in the amount of 5,733,057.87 Baht.
● IEC Green Energy Co., Ltd.	
Direct Subsidiary	Related Transactions
1. GIDEC Co., Ltd.	The Company executed the connected transactions as follows <ul style="list-style-type: none"> ● Income from management fees as per contract in the amount of 360,000 Baht. ● Interest income at the rate 2 percent per annum in the amount of 3,870,152.97 Baht.
2. IEC Mae Tha Mae Taeng Co., Ltd.	The Company executed the connected transactions as follows <ul style="list-style-type: none"> ● Income from management fees as per contract in the amount of 360,000 Baht. ● Interest income at the rate 2 percent per annum in the amount of 648,657.52 Baht.

Necessity and rationale of connected transaction

In a case whereby the Company enter into any form of contracts or transaction is made between the Company and its subsidiaries, directly or indirectly, and a third party, the Company will consider based on necessity and appropriateness of entering into such transaction while prioritizing the benefits to the Company

Measure or procedure for approval of related transaction

In a case whereby the Company enter into any form of contracts or transaction is made between the Company and its subsidiaries, directly or indirectly, and a third party, in order to protect the benefits of the Company, the board of directors stipulated that the procedure must be done in accordance with the Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions. Price and conditions must be set as if conducting transaction with any third party whereby stake holding directors or employees must not partake in the approval process.

Policy and tendency to conduct related Transactions in the future

Related transaction will be conducted. However, the Company will carefully exercise discretion in each related transaction while prioritizing the benefits to the Company.

2. Transaction between the Company and direct and indirect subsidiaries

Details as per Note to the Financial Statements Year 2022

Performance Summary

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF FINANCEIAL POSITION

(Unit: thousand baht)

	Note	Consolidated F/S					
		31 December 2022		31 December 2021		31 December 2020	
			%		%		%
Assets							
CURRENT ASSETS							
Cash and cash equivalents	5	114,818	10.97	88,953	5.92	125,893	8.07
Trade account receivable	6	31,917	3.05	59,917	3.99	48,664	3.12
Other current receivable	4,7	54,019	5.16	108,060	7.20	124,635	7.99
Current contract assets	8	52,329	5.00	72,355	4.82	61,264	3.93
Short-term loans	4	-	-	-	-	-	-
Inventories	9	9,770	0.93	10,557	0.70	7,277	0.47
Other current financial assets	4,10	48,995	4.68	87,467	5.82	21,696	1.39
Assets held for sale		-	-	-	-	-	-
Withholding tax	11	12,255	1.17	9,311	0.62	5,240	0.34
Other current assets		7	0.00	1,941	0.13	231	0.01
Total current assets		324,109	30.97	438,562	29.20	394,900	25.32
Non-Current asset							
Other non-current financial assets	11	-	-	-	-	1,059	0.07
Investment properties	13	154,599	14.77	195,111	12.99	197,043	12.63
Property, plant and equipment	14,27,50	403,495	38.56	547,001	36.42	620,686	39.79
Non-operating assets	15	7,552	0.72	161,320	10.74	161,320	10.34
Deferred rights to use transmission line	16	29,053	2.78	31,157	2.07	32,943	2.11
Right-of-use assets	4,17	20,259	1.94	20,930	1.39	28,851	1.85
Good will	18	-	-	-	-	-	-
Other intangible assets	19	1,890	0.18	81	0.01	285	0.02
Pledged deposits at banks	20,52	55,726	5.33	55,542	3.70	68,946	4.42
Advance for purchasing of investment	21	-	-	-	-	-	-
Other non-current assets	23	49,752	4.75	52,063	3.47	53,910	3.46
Total non-current assets		722,327	69.03	1,063,205	70.80	1,165,044	74.68
Total assets		1,046,436	100.00	1,501,767	100.00	1,559,944	100.00

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF FINANCEIAL POSITION

(Unit: thousand baht)

	Consolidated F/S					
	31 December 2022	%	31 December 2021	%	31 December 2020	%
LIABILITIES AND SHAREHOLDERS' EQUITY						
<i>Current liabilities</i>						
Bank overdrafts and short-term loans						
from Finance insitutions	24,50		27,486	2.63	4,909	0.33
Trade account payable	4,25		9,380	0.90	24,311	1.62
Other current payable	4,26		130,440	12.46	122,355	8.15
Accured expense	4		34,763	3.32	44,612	2.97
Current portion of long-term loans	27,50		43,200		37,200	
Long-term loans in default			-		-	
Current portion of lease liabilities	4,28		3,824	0.37	3,907	0.26
Accured income tax			1,519			
Short-term loans			-		-	
Current provisions	30		39,670	3.79	26,650	1.77
Advance received for purchase of shares			-		-	
Other current liabilities			2,435	0.23	797	0.05
Total current liabilities			292,717	27.97	264,741	17.63
<i>Non-current liabilities</i>						
Long-term loans	27,50		19,440.53	1.86	68,640.50	4.57
Deferred tax liabilities	22		2,008.54	0.19	1,542.15	0.10
Lease Liabilites	4,28		13,022.21	1.24	13,090.95	0.87
Non-current provisions for employee benefit	4,29		3,606.73	0.34	5,150.12	0.34
Non-current provisions	4,30		8,325.83	0.80	8,325.83	0.55
Other non-current liabilities			2,428.93	0.23	9,442.42	0.63
Total non-current liabilities			48,832.76	4.67	106,192	7.07
TOTAL LIABILITIES			341,549.48	32.64	370,933	24.70

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF FINANCEIAL POSITION

(Unit: thousand baht)

	Note	Consolidated F/S					
		31 December 2022	%	31 December 2021	%	31 December 2020	%
LIABILITIES AND SHAREHOLDERS' EQUITY (Continued)							
<i>Shareholder'equity</i>							
Share capital commonsahre at baht 0.01 par v	31						
- Registered 623,363,850 shares		2,493,455.40		4,476,576		4,476,576	
Issued and paid-up 623,363,850 shares		2,493,455.40		2,493,455		2,493,455	
Share premium on ordinary shares	31,32	-		1,422,185		1,422,185	
Additional paid-in capital from reduction in par value of ordinary shares		-		-		-	
		-		464,905		464,905	
Discount from changes in ownership interest in subsidiary		-		-		-	
		(369,648.22)		(369,648)		(369,648)	
Retained earnings (Deficits)		-		-		-	
Appropriated		-		-		-	
Legal reserve	31,33	-		2,096		2,096	
Deficit		(1,418,830.49)		(2,882,159)		(2,897,538)	
Other componaents of equity	11	-		-		747.00	
Total equity attributable to owners of the parent		704,976.69		1,130,834	75	1,116,202	72
Non-controlling interests		-		-		-	
Total equity		704,976.69		1,130,834	75	1,116,202	72
TOTAL LIABILITIES AND EQUITY		1,046,526.17		1,501,767	100	1,559,944	100

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

(Unit: thousand baht)

	Note	Consolidated F/S					
		2022	%	2021	%	2020	%
Revenue							
Revenue from sales of good or rendering of services		309,626	100.00	399,172	100.00	421,907.08	100.00
Revenue from subsidy for adders	35,51	40,461	13.07	115,134	28.84	135,373.13	32.09
Gain on sale of current other financial assets	4	-	-	48,540	12.16	-	-
Dividend income	4	925	0.30	1,373	0.34	34.38	0.01
Reversal cash received in advance from land sale	13	7,220	2.33	-	-	-	-
Interest income		-	-	-	-	-	-
Reversal of provision for penalty under the contract		-	-	-	-	11,625.89	2.76
Other income	4,36	10,219	3.30	8,629	2.16	4,821.11	1.14
Total revenues		368,451		572,848		573,762	
Expense							
Cost of sale of goods or rendering of service	4,14,16,17,19	330,826	106.85	466,928	116.97	479,411.53	113.63
Distribution costs	37	5,125	1.66	6,196	1.55	6,265.25	1.48
Administrative expense	4,14,16,17,19,38	84,066	27.15	73,931	18.52	66,079.38	15.66
Other expense	40	315,762	101.98	15,633	3.92	14,045.42	3.33
Total expense		735,778	237.63	562,689	140.96	565,802	134.11
Profit (loss) from operating activities		(367,327)		10,160		7,960	
Financial income	4	413	0.13	465	0.12	887.51	0.21
Financial cost	4,41	5,405	1.75	8,237	2.06	11,959.15	2.83
Impairment loss of assets (reversal)	43	43,769	14.14	(15,916)	(3.99)	(30,939.73)	(7.33)
Expected credit loss of receivables and other current receivables (reversal)	4,6,7,8	9,228	2.98	3,746	0.94	(3,424.28)	(0.81)
Profit (Loss) before income tax expenses		(425,316)	(137.36)	14,558	3.65	31,252	7.41
Tax expense (income)	22,44	2,326	0.75	-	-	-	-
Profit (Loss) for the period		(427,643)	(138.12)	14,558	3.65	31,252	7.41

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF CASH FLOW

(Unit: thousand baht)

	Note	Consolidated F/S		
		2022	2021	2020
Cash flows from operating activities				
Profit (loss) for the period		(427,643)	14,558	31,252
Interest income		(413)	(465)	(888)
Interest expense		5,405	8,237	11,959
Depreciation and amortization		57,661	115,533	115,356
Reversal expected credit loss of receivables and other current receivables		9,228	3,746	(3,424)
Bad debts and Doubtful debts expense		-	-	7
Loss on write off of other current receivables		23,281	559	1,307
Loss on write off of withholding tax		36	171	1,779
Reversal of allowance for impairment of withholding tax		-	-	(1,637)
Loss on impairment of withholding tax		1,109	-	-
Unrealized loss from changes in fair value of other current financial assets		-	-	-
		318	1,257	607
Gain on sale of other current financial assets		19,233	(48,540)	(181)
Loss on impairment of investment properties		38,467	-	511
(Gain) Loss on disposal of equipment		243,689	314	(234)
Loss on write off of equipment		29,610	14,042	10,331
Loss on impairment of property, plant and equipment (Reversal)		88,504	(968)	(24,188)
Loss on impairment of non operation assets (Reversal)		(74,749)		
deferred rights to use transmission line		305	(67)	(67)
Loss on write off of other non-current assets		-	-	14
Reversal of allowance for impairment of intangible assets		(3,868)	(4,882)	(5,559)
Reversal of allowance for impairment of advance for purchase of investment		(6,000)	(10,000)	-
Reversal of cash received advance purchase investment		(7,220)		
Unrealized (gain) loss on exchange rate		-	324	53
Provision for rid Solar panel		1,292		
Provision for penalty under the contract (reversal)		15,647	3,829	(11,626)
Provision on lawsuit		-	-	-
Employee benefit expenses		724	732	921
Dividend in come		(925)	(1,373)	(34)
Income Tax		2,326		
		16,016	97,008	126,261

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF CASH FLOW

(Unit: thousand baht)

	Note	Consolidated F/S		
		2022	2021	2020
<i>Changes in operating assets and liabilities</i>				
Trade account receivable		29,353	(12,605)	14,747
Other current receivables		31,873	20,499	3,336
Current contract assets		8,365	(17,973)	(6,369)
Inventories		788	(3,280)	(3,751)
Other current assets		1,934	(1,710)	82
Other non-current assets		2,311	1,848	(1,366)
Trade account payable		(14,930)	(2,274)	(9,869)
Other current payable		8,092	4,199	4,907
Accrued expense		(9,939)	7,719	(8,845)
Other current liabilities		346	10	(68)
Payment of employee benefit expenses		(15)	-	(15)
Payment of provision on lawsuit		-	-	(50)
Payment for late fines of the contract		(2,627)		
Other non-current liabilities		207	233	-
Net cash generated from (used in) operating		71,774	93,673	119,001
Withholding tax paid		(5,642)	(4,242)	(1,643)
Withholding tax received		716		
Net cash from (used in) operating activities		66,848	89,431	117,358

THE INTERNATIONAL ENGINEERING PUBLIC COMPANY LIMITED AND SUBSIDIARIES

STATEMENT OF CASH FLOW

(Unit: thousand baht)

	Note	Consolidated F/S		
		2022	2021	2020
Cash flows from investing activities				
Interest received		411	470	1,083
Dividend received		925	1,373	34
Current investments		-	-	-
Purchase of other current financial assets - Fixed account		(96)	(594)	
Purchase of other current financial assets - Trade investment		(214,942)	(147,484)	(13,489)
Cash received from sales of current financial assets - Trade of investment		233,960	128,725	1,662
Cash received from sale of non current financial assets		-	988	
Sale of Investment in property		3,608		
Purchase of property, plant and equipment		(43,253)	(40,978)	(20,857)
Sales of equipment		1,933	88	234
Sale of non operating assets		1,764		
Purchase of intangible assets		(24)	-	-
Pledged deposit at bank		(184)	13,404	6,866
Cash received from advance for purchase of investment		-	10,000	-
Cash pay from advance for purchase of investment		6,000	(10,000)	-
Net cash from (used in) investing activities		(9,898)	(44,007)	(24,467)
Cash flows from financing activities				
Interest paid		(5,413)	(11,502)	(17,455)
Bank overdrafts		2,577	(5,379)	3,822
Proceeds from short-term loans from financial institutions		60,000	40,000	40,000
Payment of short-term loans from financial institutions		(40,000)	(60,000)	(20,000)
Payment of long-term loans from financial institutions		(43,200)	(39,073)	(92,787)
Payment of lease liabilities		(5,048)	(6,409)	(4,803)
Net cash used in financing activities		(31,084.53)	(82,363.78)	(91,223.94)
Net increase (decrease) in cash and cash equivalents		25,865	(36,939)	1,547
Cash and cash equivalents at 1 January	6	88,953	125,893	124,345
Cash and cash equivalents at 31 December	6	114,818	88,953	125,893

Key Financial Ratios

the International Engineering Public Company Limited and Subsidiaries

Key Financial Ratios

	2022	2021	2020	2019
Liquidity Ratio				
Current ratio (times)	1.11	1.66	0.99	0.80
Quick ratio (times)	0.67	0.89	0.49	0.28
Cashflow ratio (times)	0.24	0.27	0.27	0.07
Account receivable turnover ration (times)	7.62	9.47	9.94	9.09
Average collection period (days)	47.87	38.53	36.71	40.18
Inventory turnover ratio (times)	32.55	52.36	88.75	70.09
Average product sales period (days)	11.21	6.97	4.11	5.21
Payable turnover ratio (times)	19.64	18.35	15.21	18.52
Payment period (days)	18.59	19.89	24.00	19.71
Profitability Ratio				
Gross profit margin (%)	6%	9%	14%	9%
Operating profit margin (%)	-105%	2%	1%	-14%
Cash ot profitability ratio (%)	-18%	880%	1474%	-53%
Net profit margin (%)	-116%	3%	5%	-12%
Return on equity (%)	-61%	1%	3%	-6%
Efficiency Ratio				
Return on assets (%)	-41%	1%	2%	-4%
Return on Fixed assets (%)	-106%	3%	5%	-9%
Assets turnover rate (times)	0.35	0.38	0.37	0.34
Financial Ratio				
Debt to equity ratio (times)	0.48	0.33	0.40	0.48
Interest coverage ratio (times)	-67.88	1.29	0.74	-3.81
Profit (Loss) per share	-0.69	0.00006	0.00013	-0.00026
Book Value per Share (BVPS)	1.131	0.005	0.004	0.004

the International Engineering Public Company Limited

Key Financial Ratios

	2022	2021	2020	2019
Liquidity Ratio				
Current ratio (times)	2.61	4.28	2.25	1.62
Quick ratio (times)	1.27	1.78	1.15	0.94
Cashflow ratio (times)	0.27	0.11	-0.40	-0.29
Account receivable turnover ration (times)	4.19	3.52	1.47	4.79
Average collection period (days)	87.14	103.75	247.94	76.24
Inventory turnover ratio (times)	0.00	0.00	749.55	19.20
Average product sales period (days)	0.00	0.00	0.49	19.01
Payable turnover ratio (times)	23.50	28.57	15.90	9.26
Payment period (days)	15.53	12.78	22.95	39.42
Profitability Ratio				
Gross profit margin (%)	42%	37%	22%	20%
Operating profit margin (%)	-322%	62%	-3%	-98%
Cash ot profitability ratio (%)	-17%	20%	1272%	66%
Net profit margin (%)	-585%	108%	41%	-231%
Return on equity (%)	-123%	25%	10%	-44%
Efficiency Ratio				
Return on assets (%)	-71%	19%	7%	-30%
Return on Fixed assets (%)	-6361%	4561%	1187%	-3669%
Assets turnover rate (times)	0.12	0.17	0.17	0.13
Financial Ratio				
Debt to equity ratio (times)	0.74	0.31	0.41	0.49
Interest coverage ratio (times)	-545.53	244.70	18.12	-38.95
Profit (Loss) per share	-0.47	0.00	0.00	-0.00064
Book Value per Share (BVPS)	0.38	0.002	0.002	0.001

Company General Information

Company Profile

Company Name :	The International Engineering Public Company Limited
Initial :	IEC
Company Registration :	0107536000323 (Formerly Bor Mor Jor No. 106)
Nature of Business :	The Company provides information technology solutions and unified Communications, including business operation of solar power plants, MSW power plant and Biomass Energy.
Registered Capital :	311,681,925.00 Baht (as of 8 February 2023)
Paid Up Capital :	311,681,925.00 Baht (as of 8 February 2023)
All Sold Ordinary Shares :	623,363,850 shares (as of 31 December 2022)
Preferred Shares :	-None-
Headquarter :	333/86, 333/89 IT Square Building, Tower 1, floor 6 th Kamphaengphet 6 Road, Talat Bangkhen, Lak Si, Bangkok 10210 Tel: (0) 2619 0199 Fax: (0) 2619 0019 Website: http://www.iec.co.th

Other References

The Securities Registrar:	Thailand Securities Depository Company Limited 93, The Stock Exchange of Thailand Building, Ratchadaphisek Road, Din Daeng District, Bangkok 10400 Tel: (0) 2009 9999 Fax: (0) 2009 9991
Auditor's Information	Certified Public Accountant from NPS Siam Audit Ltd. 1. Mr. Chaikrit Warakitjaporn Certified Public Accountant, Registration No. 7326 2. Miss Kamontat Jitkarnka Certified Public Accountant, Registration No. 10356 NPS Siam Audit Ltd. 555/5-6 SSP Tower, 5th Floor, Soi Sukhumvit 63 (Ekamai) Sukhumvit Road, Klongton Nua Sub-district, Wattana District Bangkok 10110 Tel: (0) 2711 5300 Fax: (0) 2711 5866
Investor Relations:	Miss Chollada Wongvorazathe 333/86, 333/89 IT Square Building, Tower 1, floor 6 th Kamphaengphet 6 Road, Talat Bangkhen, Lak Si, Bangkok 10120 Tel: (0) 2619 0199 Ext. 109 Fax: (0) 2619 0019 Website: http://www.iec.co.th/index.php/investor
Business Valuer:	Brent Joe Cosens Consulting Company Limited 17/1 Sukhumvit 64/1, Sukhumvit Road Phra khanong Tai Sub-district, Phra khanong District, Bangkok 10260 Tel: (0) 2332 8929-31 Fax: (0) 2332 8932

Investors can learn more about the company issuing securities

at the company's website www.iec.co.th

IEC

since 1922



The International Engineering Public Company Limited

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