

PART I

BUSINESS OPERATION

Part 1: BUSINESS OPERATION

1. Policy and Business Overview

History and Business Overview

Thai Polycons Public Company Limited or “TPOLY” was incorporated on December 26, 1988 with a registered capital of Baht one million by a group of engineers, led by Mr. Charoen Chanpalangsri who has gained vast experience in engineering, for the operation of construction business. The founders of TPOLY have envisioned the growing demand of engineering service, which is a substantial factor supporting the national economic growth. TPOLY was converted into a public limited company on March 24, 2008 and listed on the Stock Exchange of Thailand on March 4, 2009. Since the Company’s incorporation, its business has gradually been expanding and TPOLY has made a large amount of investment in other businesses in its subsidiaries, including property, trading and power, and also in other companies in the form of joint venture. Therefore, the Company’s registered capital has been gradually increased. As of December 31, 2018, the registered capital of TPOLY was Baht 692,868,493 in total (Baht six hundred and ninety-two million, eight hundred and sixty-eight thousand, four hundred and ninety-three) with the paid-up capital of Baht 572,759,484 (Baht Five hundred and seventy two million, seven hundred fifty nine thousand, four hundred and eighty four baht only). The major shareholders are Chanpalangsri family and executives of TPOLY.

TPOLY has provided the construction service to both government and private sectors, e.g. shopping mall, horizontal and vertical buildings, industrial plant, as well as power plant. The construction service involves the civil engineering, engineering system, and landscape architecture. TPOLY mainly focuses that each construction project must be completed on schedule and under the high-standard quality. In this regard, an information system called ERP (Enterprise Resource Planning) has been used to control the Company’s cost, budget, and cash flow projection. As a result, all of the Company’s works have been widely accepted by state and private project owners. Also, TPOLY has been awarded ISO 9001:2008 by BUREAU VERITAS Certification in respect with its quality management for construction and

engineering works. Business operation details of the Company, subsidiaries, and associated companies are described below.

Thai Polycons Public Company Limited (TPOLY)

TPOLY operates the construction service, including design, supply, carryout, and integrated installation of engineering system provided for both government and private sectors. TPOLY may act as the main contractor or sub-contractor by means of bidding or negotiation or cooperation with other companies in the form of joint venture. The Company's service may be categorized by nature of work and installation system into 5 main types as follows:

- (1) Civil engineering
- (2) Electrical system
- (3) Air-conditioning system
- (4) Sanitation system and fire prevention system
- (5) Telecommunication system

TPC Asset Company Limited

TPC Asset Company Limited ("TPCA") was incorporated on May 25, 2011. Its current registered capital is Baht 230 million whereas TPOLY holds 99.99 percent of the total of registered capital to operate the business of land and houses for sale whereas TPCA is the project developer and owner of various housing estate projects. The present active projects include:

Greenwich Town Home Ramintra comprising 174 units of 3-storey modern town homes; and

Greenwich Prime Hathairat comprising 94 units of 2-storey single detached houses.

At present, TPCA plans for its third housing estate project. Potential plots of land around Bangkok have been searched so as to carry out the housing estate project most relevant to the market need. It is expected that the project details could be clarified by the second quarter of 2019.

TPC Power Holding Public Company Limited

TPC Power Holding Public Company Limited or TPOCH was incorporated on December 26, 2012. It was converted into a public limited company on June 19, 2014 and listed on the Stock Exchange of Thailand on January 8, 2015 in which TPOLY holds 41.26 percent of the registered capital. TPOCH operates the business by holding shares of other companies whose business operation deals with the production and sales of electricity generated by various types of renewable energy, and by providing other related supporting services for its subsidiaries' operations. TPOCH has made investments in its subsidiaries and other jointly controlled entities. TPOCH, currently, plans to operate the production and sales of electricity generated from biomass in 11 power plants which has already COD 6 power plants (as of February 9, 2018). The main revenues of TPOCH are the dividends and service fees from these companies and other new subsidiaries.

TPC Bangkok Supply Company Limited

TPC Bangkok Supply Company Limited ("TPCB") was incorporated on January 16, 2013 with the current registered capital of Baht 5 million in which TPOLY holds 99.99 percent of its total shares to operate the business of trading, import and export of all types of domestic and international goods. TPCB has studied the project probabilities and sought for the goods purchasing sources. The targeted goods involve goods for construction work, goods for biomass power plants, and other goods in order to boost its revenues.

To shape the business operation of TPOLY, which shall enable its stakeholders or shareholders to gain the full benefits, the Board of Directors of TPOLY defines the vision, mission, and business objectives as specified below.

1.1 Vision and Mission

Vision: "To be an integrated construction company with continual development and growth under stable achievements and sustainability"

Mission

- Delivery of the best quality work based on customers' utmost interest and satisfaction
- On-time work delivery
- Management of all risks associated with strategy, operations, and finance
- Consistent improvement of corporate competitiveness

- Tangible enlargement of productivity in operations
- Development of construction technologies and innovations
- Creation of good returns to shareholders, and stable business expansion
- Management for environmental impact according to international standards, and involvement in improving the quality of life of local communities
- Business undertaking with business partners based on impartiality for trust, relationship, and good cooperation so as to develop the potential and effectiveness of business operation together in the long term

Business objectives: TPOLY aims at the continual growth and development for its corporate stability and sustainability based on the Philosophy of Sufficient Economy together with an integration of reasonable development, modesty, good immunity and risk management systems, which are substantial conditions for sustainable development. The Company's growth has been firmly tied with its customers' prosperity or we may say that we both enjoy the growth together. Every business pace of TPOLY is considered carefully, and moves forward by an appropriate time and opportunity. As a result, TPOLY is able to overcome the past economic crises. The strong past experience shapes the Company's secure and prosperous future. The Company has been developed to achieve excellence in the business cluster under the corporate culture, which prioritizes the Company's human development, retention of operating standard along with the management of service cost, and good financial management policy. According to the Company's vision and mission, TPOLY not only focuses on its corporate development to be an integrated construction company, it has expanded its investments to other businesses in order to mitigate certain business risks, and to gain its customers and investors' trust.

1.2 Major Changes and Development

Thai Polycons Public Company Limited ("TPOLY" or "Company") was found in 1988 under the name of Thai Polycons Company Limited with the initial registered capital of Baht 1 million to provide all kinds of construction services by a group of engineers, led by Mr. Charoen Chanpalangsri who has gained vast experience in engineering. When the Company has been awarded for high-value projects, its registered capital has been gradually increased to Baht 10 million, Baht 60 million, Baht 260 million, Baht 300 million, and Baht 400 million

respectively. Up to now, the registered capital of TPOLY is Baht 692,868,493 in total (Baht six hundred and ninety-two million, eight hundred and sixty-eight thousand, four hundred and ninety-three only) with the paid-up capital of Baht 566,892,947 (Baht five hundred and sixty-six million, eight hundred and ninety-two thousand, nine hundred and forty-seven only).

The Company was converted into a public limited company on March 24, 2008. It was listed on the Stock Exchange of Thailand and its shares were first traded on the SET on March 4, 2009. In the same year, an information system called ERP (Enterprise Resource Planning) was first used to control the Company's cost, budget, and cash flow projection. Also, TPOLY has been awarded ISO 9001:2008 by BUREAU VERITAS Certification in respect with quality management for construction and engineering works.

2010: TPOLY began the operation of property development. In this regard, a subsidiary was established in which TPOLY holds 99.99 percent of shares. This subsidiary had the initial registered capital of Baht 10,000,000 (Baht ten million only). At present, the registered capital of this subsidiary totals Baht 230,000,000 (Baht two hundred and thirty million only) in the name of TPC Asset Company Limited. The present key projects include Greenwich Town Home Ramintra comprising 174 units of 3-storey modern town homes, and Greenwich Prime Hathairat comprising 94 units of 2-storey single detached houses.

2011: TPOLY started the business of production and sales of electricity generated from renewable energy by mainly making investments in some companies that operate the biomass power plants. The first company where the Company invested is Chang Raek Biopower Company Limited with a portion of shares held by TPOLY at 65 percent of the registered capital amounting to Baht 10,000,000 at that time (portion of shares currently held is increased to 73.125 percent of the registered capital amounting to Baht 200,000,000). Later, TPOLY also held shares in Thungsung Green Company Limited and Bangsapan-noi Biomass Company Limited (currently defunct). At that time, neither of them has begun the commercial operation.

Later, the Meeting of the Board of Directors of Thai Polycons Public Company Limited, No. 4/2012 on November 12, 2012 resolved to restructure the shareholding structure of the energy business. A new subsidiary would be established as a holding company to operate the business by holdings shares in other companies under the name of TPC Power Holding Company Limited ("TPCH"). This new subsidiary shall hold shares in all subsidiaries that have operated the energy business according to the portion of shares held by the parent

company at that time. The Board of Directors also determined that TPC Power Holding Company Limited shall lead any future investments in the energy business. Later, TPC Power Holding Company Limited was registered and converted into a public limited company on June 19, 2014. Then, it was listed on the Stock Exchange of Thailand on January 8, 2015. Currently, TPCH has the paid-up capital of Baht 401,200,000 (Baht four hundred and one million, two hundred thousand only) in which 41.26 percent of its registered capital are held by Thai Polycons Public Company Limited.

2013: Mr. Charoen Chanpalangsri, Managing Director and a major shareholder of TPOLY at that time, who held 52.78 percent of the registered capital passed away in an accident. The Board of Directors, therefore, resolved to appoint Mr. Chainarong Chanpalangsri, a member of the Executive Board of Directors at that time, to act as the Managing Director and Chairman of the Executive Board whereas the largest portion of shares was passed on to Mrs. Kanoktip Chanpalangsri (Mr. Charoen's wife).

In the same year, another subsidiary was established to operate the business of trading, importing and exporting all types of domestic and foreign goods in which TPOLY holds 99.99 percent of its registered capital amounting to Baht 5,000,000 (Baht five million only).

2015: Subject to the Annual General Meeting of Shareholders, No. 1/2015 dated May 27, it approved the Company to issue and offer for sales of 62,988,045 capital-increase ordinary shares to its existing shareholders at a ratio of 8 existing shares for 1 new share at the offering price of Baht 4.00 per share and 125,976,090 units of warrant ("TPOLY-W2) allotted to its existing shareholders who exercised their rights to purchase such new ordinary shares at a ratio of 1 new allotted share per 2 unit of warrants issued free of charge. A warrant holder of 1 unit of warrant shall be able to exercise his/her right to purchase 1 new ordinary share on the price of Baht 3.00 per share. The first exercise date was the last business day of September 2015, and subsequent exercise dates would be on the last business day of each quarter of a calendar of each consecutive year throughout the warrant maturity period which was for 3 years since the issuing date. The first exercise date was on September 30, 2015 and June 28, 2018 was the last exercise date (as on the 6th exercise warrants according to the exercise period on December 30, 2016, the number of unexercised warrants was 125,975,546 units).

In the same year, the Meeting of the Board of Directors, No. 10/2015 approved the sale of shares of TPC Power Holding Public Company Limited (TPCH) held by TPOLY in an

aggregate of 2,500,000 shares, representing 1.22 percent of the total shares of TPCH held by TPOLY at that time. This transaction helped boost the Company's financial liquidity, and lessen its financial burden.

On November 27, 2015, the Extraordinary General Meeting of Shareholders, No. 2/2015 approved the sale of shares of TPC Power Holding Public Company Limited (TPCH) held by TPOLY in an aggregate of 37,500,000 shares, representing 18.47 percent of the total shares of TPCH held by TPOLY at that time. After this sale, TPOLY held shares in TPCH in the aggregate of 165,549,960 shares, representing 41.26 percent of the total issued shares of TPCH. However, TPCH remains the Company's subsidiary although the portion of shares in TPCH as held by TPOLY may be less than 50 percent of the total issued shares of TPCH. Since TPOLY continues retaining the controlling power in TPCH, the recognition of profit (loss) in TPCH was further stated in the Company's consolidated financial statements. However, TPOLY has not yet planned to decrease its portion of shares in TPCH in the near future. The present policy is to retain the Company's portion of shares in TPCH for not less than 40 percent of the total issued shares of TPCH.

On April 27, 2016, the 2016 Annual General Meeting of Shareholders resolved to approve for the 2015 financial statements, omission of dividend payment for the year of 2015, appointment of directors in place of those retiring by rotation, remuneration for directors, appointment of the Company's auditors, and use of the Company's legal reserve and premium on shares to compensate the retained deficit of the Company as stated in the financial statements as of 31 December 2015.

On September 23, 2016, the Meeting of the Board of Directors, No. 5/2016 approved the appointment of the Chairman of the Audit Committee to replace former Chairman of the Audit Committee who wished to resign due to his health problem, that is, Dr. Supong Limtanakool (acting as the Director, Independent Director, and Member of the Audit Committee at that time) shall replace Pol.Gen. Suthep Thamarak who acted as the Director, Independent Director, and Chairman of the Audit Committee at that time. The Board also appointed Dr. Srisuda Chongsithiphol to be the Director, Independent Director, and Member of the Audit Committee. The new board of directors of TPOLY is listed below:

- | | |
|-----------------------|---|
| 1) Dr. Thanu Kulachol | Director, Independent Director, and Chairman of the Board |
|-----------------------|---|

2) Mr. Chainarong Chanpalangsri	Director, Chairman of the Executive Board
3) Mrs. Kanoktip Chanpalangsri	Director, Member of the Executive Board
4) Mr. Pathompol Saosap	Director, Member of the Executive Board
5) Mr. Jackrit Pongprasert	Director, Member of the Executive Board
6) Mr. Cherdsak Wattanavijitkul	Director
7) Dr. Supong Limtanakool	Director, Independent Director, and Chairman of the Audit Committee
8) Mr. Pornthep Sawetwannakul	Director, Independent Director, and Member of the Audit Committee
9) Dr. Srisuda Chongsithiphol	Director, Independent Director, and Member of the Audit Committee

On January 30, 2017, the Meeting of the Board of Directors, No. 1/2017 approved the appointment of the Chairman of the Executive Board of Directors or Mrs. Kanoktip Chanpalangsri, and also approved the appointment of the President or Mr. Pathompol Saosap to replace Mr. Chainarong Chanpalangsri, who submitted his resignation as he was struck by other affairs and wished to spend time for his family. The new executive board is listed below:

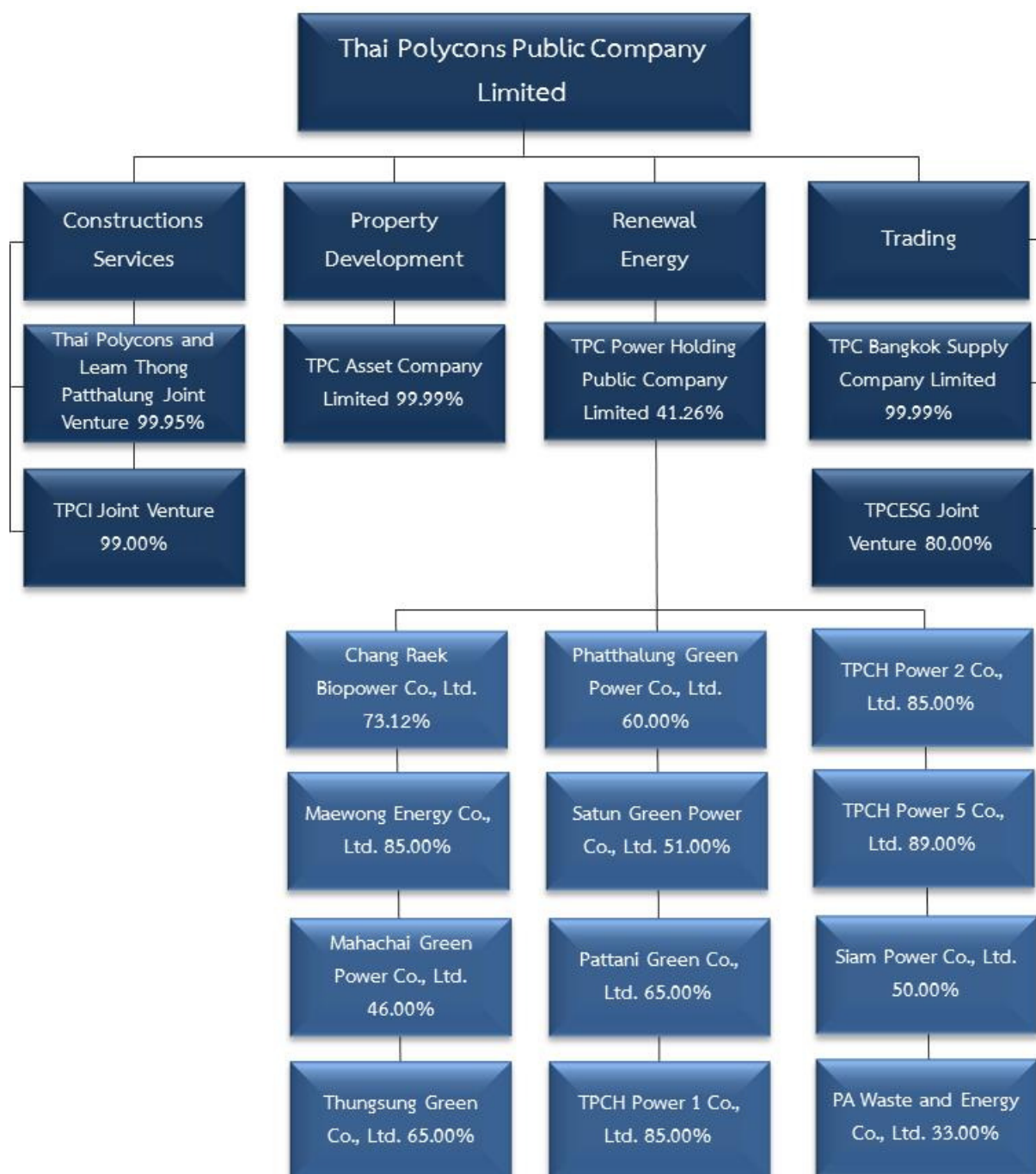
1) Mrs. Kanoktip Chanpalangsri	Chairman of the Executive Board of Directors
2) Mr. Pathompol Saosap	Member of the Executive Board, President
3) Mr. Jackrit Pongprasert	Executive Director, Executive Vice President - Operation Engineering
4) Mr. Vikul Lohamongkol	Executive Director, Executive Vice President - Technical Engineering
5) Mr. Adisorn Srisuksai	Executive Director, Executive Vice President - Accounting and Finance

On July 4, 2018, the Company registered the change of its paid-up capital from Baht 567,705,607 to Baht 572,759,484 due to the exercise of right to purchase the Company's common shares in accordance with TPOLY-W2, and the last exercise date was on June 28, 2018.

In the same year, TRIS Rating has assigned a rating of BBB+ (Triple B Straight) to the Company with “stable” outlook. This credit rating has strongly supported the Company’s competitiveness, growth from ongoing strategic investment, search for financial sources, and corporate structure and financial cost. These were consistent with the Company’s goals and investment expansion plan.

In the same year, the Company’s information system called ERP (Enterprise Resource Planning) used longer than 10 years has been updated. This updated system was the same to other leading construction companies. Consequently, the Company’s project management, cost control, budget, cash flow forecast, preparation of accounting and financial reports would be more effective.

1.3 Shareholding Structure of the Group of Companies as of 31 December 2018



According to the shareholding structure of the Group of Companies as of 31 December 2018, TPOLY held shares in its subsidiaries and joint ventures as follows:

Company Name	Percentage of Shares Held	Nature of Business
TPC Power Holding Public Company Limited	41.26	(Holding company) holding shares in companies operating the production and sales of electricity generated by renewable energy
TPC Asset Company Limited	99.99	Land and houses for sale
TPC Bangkok Supply Company Limited	99.99	Trading, importing & exporting all types of domestic and foreign goods
Thai Polycons and Laem Thong Phatthalung Joint Venture	99.95	Construction
TPCI Joint Venture	99.00	Construction

1.4 Relationship between the Group of Business and Major Shareholders

The Company's core business has not been related to or connected with other businesses of any of its major shareholders significantly.

2. Nature of Business

The businesses operated by the Company, subsidiaries, and joint ventures may be classified as follows:

1) Thai Polycons Public Company Limited and other joint ventures. At present, they provide the construction service for various projects, which may be separated into the following sections:

1. Construction of high-rise residence and shopping mall buildings
2. Construction of large office buildings
3. Construction of school buildings
4. Construction of hospital buildings

5. Construction of power plants

2) Subsidiaries. The business group of the Company's subsidiaries may be classified as follows:

1. Property development business operated by TPC Asset Company Limited regarding the sale of land and houses whereas TPOLY is the project developer and owner.

2. Holding company by making investments in companies whose business deals with the production and sales of electricity generated from renewable energy. This is operated by TPC Power Holding Public Company Limited.

3. Trading business operated by TPC Bangkok Supply Company Limited.

Revenue Structure

Transactions		Consolidated Financial Statements					
		2018		2017		2016	
		Value	Percentage	Value	Percentage	Value	Percentage
Construction	Company	1,663.56	48.61%	1,934.47	55.91%	1,911.41	69.15%
	Joint Ventures	-	0.00%	129.18	3.73%	10.87	0.39%
Land and houses for sale	Subsidiary	113.32	3.31%	258.18	7.46%	113.80	4.12%
Holding company	Subsidiary	1,560.12	45.59%	1,092.68	31.58%	672.40	24.32%
Trading	Subsidiary	29.65	0.87%	17.49	0.51%	0.00	0.00%
Other income	Company	55.29	1.62%	28.00	0.81%	55.80	2.02%
Total revenues		3,421.94	100.00%	3,460.00	100.00%	2,764.28	100.00%

Construction Service by Thai Polycons and other Joint Ventures

Product or Service Features

Thai Polycons Public Company Limited provides several types of construction works, e.g. shopping mall, office building and high-rise residence building, industrial plant, and power plant. The construction service involves all related works in civil engineering, installation of engineering systems, and landscape. The Company gains these projects from bidding and business contact whereas the customers take into account the Company's experience and past achievements. The details of each service type are described below.

1) Construction of high-rise residence and shopping mall buildings. Previously, the Company has been engaged for the construction of high-rise residence and shopping mall buildings, which are located in Bangkok and vicinity. Currently, the business areas have been expanding to other new areas; therefore, the Company has expanded its construction

areas as well. Most project owners are recognized property developers and major modern trade entrepreneurs.

Construction projects for high-rise buildings for residence and shopping mall carried out by the Company in 2018 are as follows:

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. The Base Central Phuket	Central Pattana Plc.	443.93	-	20.76	423.17	95.3%
2. Novotel Sriracha Marina Bay Hotel	RCK Hotel and Residence Co.,Ltd.	292.00	33.83	181.42	76.75	26.3%
3. ATARA Hotel Sriracha (All Project)	RCK Property Co., Ltd.	1,133.49	1,055.98	77.50	-	0.0%
		1,869.41	1,089.81	279.68	499.92	26.7%

2) Construction of large-sized office buildings. The Company provides the service for the construction of large-sized office buildings for both government and private sectors. The projects carried out by the Company in 2018 are listed below.

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. Office Building Of Hat Yai Airport	Airport Authority of Thailand	268.85	13.57	248.24	7.04	2.6%
		268.85	13.57	248.24	7.04	2.6%

3) Construction of school buildings. The Company has been trusted by many educational institutes, either in the government or private sector, for the construction of modern school buildings. The construction projects run by the Company in 2018 are as follows:

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. Multi-Purpose Educational Building - Pub	Mae Fah Luang University	697.76	411.55	286.21	-	0.0%
2. Medical Research Center, Faculty Of Med	Burapha University	892.85	656.89	228.56	7.40	0.8%
		1,590.61	1,068.44	514.77	7.40	0.5%

4) Construction of hospital buildings. The Company provides the service to both government and private sectors for the construction of hospital buildings. The projects in 2018 include:

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. Jomtien Hospital Building (Sriracha, Chonburi)	Jomtien Hospital Co.,Ltd.	303.74	-	17.46	286.28	94.3%
2. In Patient Building For 298 Beds, Phatthalung	Phatthalung Hospital	279.81	6.60	42.01	231.21	82.6%
3. New In Patient Building, Rangsit General Hospital	Rangsit Hospital Co.,Ltd.	194.09	26.66	127.89	39.55	20.4%
4. Intrarat Hospital	Intrarat Hospital Co.,Ltd.	523.36	40.83	190.71	291.82	55.8%
		1,301.01	74.09	378.07	848.85	65.2%

5) Construction of power plants. The Company provides the service for the construction of power plants, which involve the plant building, electricity generating building, office building, and other related utilities, e.g. road, electrical system, and pipeline system, etc., including other components such as car park, etc. The construction works may be divided into 2 types:

1. Construction plan as contracted. The Company carries out the construction according to the construction drawing determined by a client.

2. Turnkey contract. The Company provides an integrated service starting from the structure design and construction. The Company is able to propose any construction drawing and method most relevant to each customer's demand under the reasonable construction cost and shorter construction period.

The power plant construction projects carried out by the Company in 2018 are as follows:

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. Phatthalung Green Power Plant	Phatthalung Green Power Co.,Ltd.	642.52	638.25	4.27	-	0.0%
2. Satun Green Power Plant	Satun Green Power Co.,Ltd.	642.89	608.53	34.36	-	0.0%
3. Pattani Green Power Plant	Pattani Green Co.,Ltd.	1,296.95	3.77	317.61	975.57	75.2%
4. TPCH Power Plant 1	TPCH 1 Co., Ltd.	666.20	-	51.16	615.04	92.3%
5. TPCH Power Plant 2	TPCH 2 Co., Ltd.	653.56	-	37.65	615.91	94.2%
		3,902.12	1,250.55	445.05	2,206.52	56.5%

6) Construction of commercial buildings, shopping malls, Utility projects and others. The Company provides the service for the construction of other buildings apart from

those mentioned above, e.g. shopping mall, parking lot, road work, landscape, etc., which are the extension work of the building construction or may be the separated construction work. The projects in 2018 are as follows:

Unit: Million Baht

Project Name	Project Owner	Total Project Value	Revenue Recognition		Remaining Revenue	Remaining Percentage
			Before 2018	2018		
1. Park Siri Condo Resort	RCK Property Co., Ltd.	0.90	-	0.90	0.00	0.0%
2. Central Vellage (Samutprakarn)	Central Pattana Plc.	238.32	-	27.71	210.61	88.4%
3. Bukis Phuket (Decathlon)	Multi Property Development Co.,L	38.05	-	35.53	2.51	6.6%
4. Central Festival Phuket, Main Parking Build	Central Pattana Plc.	589.77	463.62	119.97	6.18	1.0%
5. Private concrete road (Srakaew)	Alin Craft Paper Co.,Ltd.	48.00	-	0.95	47.05	98.0%
6. Residential Building For Government Office	Narathiwat Province Government	100.00	-	11.06	88.94	88.9%
7. Landscape improvement project	Yala Administrative Court	14.86	-	14.86	-	0.0%
8. New Drop Off, Samitivej Hospital, Srinakhar	Samitivej Public Company Limited	31.40	-	31.00	0.41	1.3%
		1,061.29	463.62	241.97	355.70	33.5%

2.1.2 Market and Competition

The local construction industry has been in the midst of high competition. The new projects to be awarded depended on bidding criteria under tough competition. After passing the first bidding round as a qualified bidder, the bidding price was the core consideration issue. More intense competition in these construction projects led to the price competition but lower contract price. Another factor influencing competitiveness and pricing was the acquisition of raw material sources. The fluctuating price of raw materials gave the huge impact the construction industry as the raw material cost accounted for 40-60 percent of total project cost. Except the readiness of raw materials, other competitive factors included skills, expertise, and experience of all employees and sub-contractors. The establishment of any joint venture usually aims at certain technical assistance and business alliances.

2.1.2.1 Competitive strategy and business policy of the Group of Companies.

Apart from retaining the market share under a high competition and sluggish economy, the Group of Companies has placed emphasis on its long-term competitiveness by means of retaining construction standards, strict control of construction works, on-time delivery of quality work, and lower cost and expenses. The competitive strategy and business policy of the Group of Companies are as follows:

1) Reputation and quality of construction works. The Company has gained the construction experience over 30 years. It employs many staffs with great skills and expertise in construction works, and deep comprehension in this business. This is proved by the Company's survival from the 1997 tremendous economic crisis, and continuous growth until

it has been widely accepted in the construction industry. The Company focuses on the construction most relevant to all requirements, good quality of work, and high safety. Furthermore, upon any changes of construction and engineering technologies, the Company is capable of utilizing them promptly. This can be seen in the Company's past works that meet international standards, and extremely satisfy the customers.

2) Past accepted performance. According to the Company's work quality and service provided previously, it has deeply satisfied the customers. The Company has been trusted by many customers who are so pleased to employ the Company, and further recommend other customers. The Company has the core policy to retain and strengthen its reputation by performing the following actions:

- Retaining the work quality in accordance with acceptable standards.
- Sustaining the professional integrity and ethics to works under contract.
- Completing each project as per the schedule agreed with the customer.
- Taking care of the customer's interest as if the Company were the project owner.
- Providing the post-sale service and other related services after the end of the service agreement.

3) Personnel's competence. The Company has the policy of promoting and developing its personnel, which is the most important asset of the Company, in order to improve its operating efficiency and competitiveness by taking the following actions:

- Improving the personnel's knowledge and competence regularly, either technical or management knowledge.
- Rooting consciousness for work responsibility.
- Building a friendly work environment.
- Forming team-working and coordination between the team of engineers and other company staffs in order to attain the objective of providing an excellent service to the customers.
- Utilizing KPI system and Balance Scorecard (BSC) in evaluating the work performance of each division and staff.

Regarding the construction service, the Company has engaged a team of engineers who has knowledge, abilities, and long working experience. The Company's

management team was capable of managing the construction projects; therefore, each project could be completed as scheduled. As a result, the Company's cost became lower while its operating performance was better. In respect with daily employees who were in the construction team, the Company set up the project standards on new-coming employee training, and the requirements on the regular labor skill development. The Company also focused on the maximum work safety. It had a working team in charge of safety, which would arrange the training activities to keep all employees have knowledge and understanding in safety, inspect the work procedures, and prepare the accident prevention plan, and correct any possible working defects. These helped minimize any possible accidents, and boost the work efficiency, so the Company has less cost resulted by accidents. Regarding the employment of sub-contractors, the Company has always selected the sub-contractors who had the good and qualified work performance, delivered the works punctually, and had the specific expertise in construction.

4) Regarding the construction service, the Company has engaged a team of engineers who has knowledge, abilities, and long working experience. The Company's management team was capable of managing the construction projects; therefore, each project could be completed as scheduled. As a result, the Company's cost became lower while its operating performance was better. In respect with daily employees who were in the construction team, the Company set up the project standards on new-coming employee training, and the requirements on the regular labor skill development. The Company also focused on the maximum work safety. It had a working team in charge of safety, which would arrange the training activities to keep all employees have knowledge and understanding in safety, inspect the work procedures, and prepare the accident prevention plan, and correct any possible working defects. These helped minimize any possible accidents, and boost the work efficiency, so the Company has less cost resulted by accidents. Regarding the employment of sub-contractors, the Company has always selected the sub-contractors who had the good and qualified work performance, delivered the works punctually, and had the specific expertise in construction.

5) Efficient procurement. The Company established the procurement policy for transparency and better competition between raw material suppliers in order to ensure that the Company's cost was appropriate.

Regarding the Company's procurement, an efficient and transparent procurement system has been set up. The selling prices of construction equipment and materials would be compared with the construction cost charged by each sub-contractor to control the construction cost. In addition, according to the Company's management, the construction equipment and materials would be used cost-effectively. The Company had some warehouses to keep any excessive construction equipment and materials in the good condition, which might be used in other projects. Such cost management helped increase the Company's potential in the industry competition.

2.1.2.2 Customer features, distribution, and channel of distribution. For projects obtained by bidding, the Contract Development and Estimate Department of the Company shall coordinate with a particular customer directly. After the Company received an invitation to bid or was interested in taking part in any bid, the Contract Development and Estimate Department shall coordinate to ask for all related documents, e.g. construction drawing, other construction requirements, etc., and it shall assess the scope of work and construction cost for further submission of the price proposal. For projects obtained by negotiations, the Company was determined to tie the good relationship with each customer as it was more likely that the Company might obtain other new projects from these existing customers. The Company's targeted customers were the project owners in the private sector who had the business creditability and secure financial status. The Company, initially, aimed at projects with high returns and low risks. The Company also tried to obtain more projects from the customers who had creditability, used to work together, and had no conflicts in working.

The Company has gained revenues from its local construction service. Its local customers may be divided into 3 following groups:

Group 1: Private sector, which included the property developers, industrial entrepreneurs, and modern trade entrepreneurs. These customers had the good reputation and financial status. In 2018, the Company's qualified works, which were delivered punctually, were acceptable; therefore, it could sustain the good relationship with its existing customers, be offered for more projects.

Group 2: Government sector, which included the government agencies and government-owned universities. The government-sector customers had a low risk of payments. To take part in the government bids, the Term of Reference or TOR imposed by

each government agency as a client had to be considered carefully. A bidder for a government bid had to gain achievements or was in the list registered with that particular government agency. At present, the Group of Companies is in the registration list with several government entities, e.g. Department of Public Works and Town & Country Planning, Bangkok, Port Authority of Thailand, Provincial Waterworks Authority, and Airports of Thailand Plc., etc. However, the Group of Companies has the policy of registering with more government agencies to have higher ability in being employed by the government sector because the Government places the policy in serial infrastructure investments, especially electricity, mass transportation, and telecommunications.

Group 3: Power plant construction. The Company has developed the Energy Business Department to provide an integrated service, starting from planning, engineering design, selection of equipment and machinery, plant construction, machinery running, and machinery repairs and maintenance. The clients include the Company's subsidiaries, government sector, and private sector.

Proportion of construction service provided to each type of customers during the past 3 years

Unit: Million Baht

ประเภท	2018		2017		2016	
	Value	Percentage	Value	Percentage	Value	Percentage
Government	830.9	39.4	937.2	37.5	1,141.6	40.1
Private	831.8	39.5	989.1	39.6	748.4	26.3
Power Plants	445.0	21.1	574.5	23.0	955.7	33.6
Total	2,107.8	100.0	2,500.9	100.0	2,845.8	100.0

Note: 1. Revenue recognition as at the end of the year

2. Excluding other income

2.1.3 Product or Service Procurement

(a) Product procurement features

The construction service is the business much relying on expertise in the engineering system, including the management ability to complete the project as per each customer's demands on work quality and completion schedule under the project cost that

must give some profit for the Company. The key factors determining the Company's production capacity include:

- Number of engineers, including the project directors, project managers, project engineers, and engineers.
- Number of sub-contractors with experience and expertise in each type of works
- Working capital that must be sufficient and appropriate to the scope of work.

To deliver the quality work to each customer under a limited timeframe, the number of engineers and sub-contractors in charge of each project depends on the scope and complication of each work.

Engineers. As of December 31, 2018, Thai Polycons Public Company has engaged 67 engineers, which involve 5 project directors, 9 project managers, 19 project engineers, and 34 general engineers.

Sub-contractors. The Company had 300 sub-contractors in hand. Each sub-contractor team has the working experience in the specific engineering system. The Company required that each sub-contractor make an agreement with the Company, and place the security for any advance payment equivalent to the amount drawn in order to ensure that each sub-contractor would have the power and working potential so that the Company's construction service most satisfied the customers, and it mitigated the reliance to any particular sub-contractor, which might lead to a risk that if such sub-contractor failed to conform to the Company's regulations or left the work. Payments to sub-contractors would be in line with the portion of work completed under the inspection and approval by the project manager.

The sub-contractor's duty was to install the equipment or construction work pursuant to the construction drawing as approved by the customer and controlled by the Company's engineers and foremen.

Working capital. For general construction service, after the contract execution, an advanced payment shall be made to the Company in an approximate amount of 10-15 percent of the total project value. This advanced payment shall be spent as the working capital of such project. In this regard, the Company must place the advance payment bond as an exchange. The Company's performance bond must be deposited to the client throughout the project term. After the project completion and delivery, the Company's

maintenance or retention bond must be placed to such employee for a period of 1-2 years. These three types of bond must be issued by a financial institution. On average, the value of all related bonds placed to each customer accounts for 20-30 percent of the total project value. As of December 31, 2018, the balance of bonds the Company had in 7 financial institutions amounted to Baht 1,512.68 million. However, the Company may demand on more credit amount from those financial institutions in the future. For any high-value bid, the project awarded may be used to guarantee the loans to be spent in the Company's operation and project finance.

Procedures of accepting construction works are as follows:

1. Bidding. The Company closely monitors the bid announcements as posted in local newspapers or advised by any consulting or design company. The Company carries out the bidding procedure as follows:

1.1 Purchase of bidding documents for estimation

1.2 Price proposal

1.2.1 Price proposal documentation. After the project selection by the Executive Board, the Company's Contract Development Department shall proceed with receiving the documents for further tendering the price proposal. These documents include the project construction model and other necessary requirements so that the Company's proposal meets the standard, and is qualified for such bidding submission.

1.2.2 Cost estimation. This is a substantial step affecting the Company's project. Very-high cost estimation may cause the Company to lose the project. Conversely, very-low cost estimation may make the Company win the project, but it may receive the low profit or suffer some loss. Therefore, the Company emphasizes on cost estimation. In this regard, the Company will first survey the construction site to summarize the most appropriate construction model and method. Prices of construction materials, equipment, wage, and other related expenses must be examined. The competitive bidding price is also analyzed. Then, the Contract Development Department shall prepare the bidding proposal and operating plan, which shall be submitted to the Executive Board for inspection and approval before being proposed to the customer.

2. Negotiation. The Company may acquire a project via negotiation without tendering the bid. The Company may propose its construction service to a customer or a customer may intend to select the Company.

The Company selects each construction project by tendering the bid, or it may acquire a project by considering all related factors so that the Company's operating results are in line with the determined target, e.g. returns, creditability and payment ability of the project owner, project type and size, operating period, the Company's undelivered projects, financial sources, and personnel.

Work procedures when a construction project is in progress

1. Work allocation. After the project acquisition, the Contract Development Department shall have a meeting with the Project Director and the Project Manager in order to deliver the construction contract, bidding documents, and initial action plan to the Project Manager who shall be responsible for the project management together with the Project Director, which will be further delivered to other responsible departments.

2. Appointment of the Project Manager, who will be responsible for all aspects of the project under the control of the Project Director.

3. Planning for project details by the Project Manager by:

- Preparing the action plan to be relevant the project conditions and payment schedule
- Preparing the plan for money collection and payment of the project
- Preparing all steps of shop drawing to be proposed to the client who must approve for the construction drawing and construction materials
- Labor planning by classifying the workers, and estimating the number of workers for each type of work. The Company shall employ the sub-contractors for some types of work, e.g. piling work, installation of electricity and piping systems, steel roof structure, aluminum work, etc. The Company shall engage the sub-contractors who are in the list of sub-contractors approved by the Executive Board. The employment also depends on several factors, e.g. service price, working period, past performance, responsibility in working, and financial stability.
- Planning for arranging the machinery to be used in construction.

- Preparing a temporary office, and providing certain utilities, e.g. water, electricity, telephone, internet, etc.

- Preparing the work schedule with details for each project phase.

4. Construction undertaking. During the construction, the controllers and supervisors of each division will coordinate to inspect, supervise, and retain the progress work as per the preset plan and schedule.

5. Follow-up and inspection. The Project Manager has duties of inspecting the construction correctness, sending some photos showing the construction progress to the Project Director on the daily basis, submitting the work progress report on the monthly basis by comparing the construction progress with the construction plan, and comparing the actual cost with the estimated cost. If the project is delayed from the work plan or the actual cost of any project is higher than the estimated cost or the client alters the construction drawing, the Project Manager will have a meeting with the Project Director to plan for such alteration, and to revise the work plan. The Project Director will inspect the construction site on the weekly basis, and submit the project summary to the Company's top management on the monthly basis.

6. Delivery of work progress. According to most construction plans, the work progress will be usually determined subject to the construction plan. Upon the completion of each construction phase, the advisor who controls the construction work will proceed with the inspection and approval before proposing such work progress to the employee to withdraw the construction progress payment as per the contract.

Work procedures after project completion

Delivery of work. Upon project completion, the client shall be informed to come to the project site for work inspection. For any defects, the Company shall perform correction actions until the client feels satisfied. When the client accepts the construction work and also returns the retention money after the end of warranty period (approximately 1 year in general), the client shall give back the performance bond to the Company.

(a) Supplies of raw materials, equipment, and labor for construction

To install an engineering system with the good quality and meeting the client's demand, all materials and equipment must be acquired from certain appropriate sources. The Company normally purchases materials and equipment from distributors as referred in

the list of construction materials and equipment distributors as approved by the Company for their initial acceptable quality and service only.

To procure those construction materials and equipment, the main materials and equipment for each project are usually different subject to the requirements and nature of the project determined by each client. Therefore, the Procurement Department must compile all details about the main equipment of each project for further procurement. In this regard, the Company shall arrange a bid tendered by more than 2 distributors as appropriate. The Company shall take into account the best price, good payment conditions, and qualifications of materials most relevant to the Company's demand.

For general materials much utilized in every project, the Procurement Department will make the collective purchase order to reduce the unit cost, and mitigate the risk from the fluctuation price of such raw materials. For example, the Company shall make contracts to purchase the steel bar for 1-3 months in advance, and purchase the cement for the whole project in advance.

Sustaining the good relationship with distributors of raw materials and equipment is an important factor beneficial to the Company's business operation as it will be offered a special discount, punctual delivery of materials, technical assistance, storage of unused inventories, prevention for shortage of raw materials, etc. Most raw materials and equipment distributors have contacted with the Company for years; therefore, our relationship has been good. These raw materials and equipment distributors may give some technical assistance for new products launched to the market, e.g. cooler, water circulation pump, fan coil unit, air-conditioner, automatic control equipment, etc.

Regarding the daily workers, the Company employs both Thai labors and lawful alien workers, who must be trained for their skill development regularly. For the workers in any construction projects at the southern border provinces, the Company shall employ some workers from the central region at a special rate to motivate their working, and prevent some disguising terrorists.

(b) Environmental impact

The Company places measures for the standardized construction and building system installation, which must be in conformity with any requirements and regulations prescribed by law. The Company sets priority that its operation must not give impact to the environment. The Company's workers are always trained to have knowledge and

understanding about all functions in order to prevent possible accidents or danger from working, and to avoid the environmental impact. The Company sets up a safety team to be responsible for this work directly.

(c) Occupational safety and health practice (statistics on accidents)

The Company and the Board of Directors of the Company have been highly concerned about life and property safety, and health at workplace. These issues are determined as the Company's policy and practice in accordance with the Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment B.E. 2549, and the Occupational Safety, Health and Environment Act so as to perform duties efficiently and safely.

At present, the Company has an occupational safety team, comprising 12 persons, including:

Occupational Safety Officer at technical level and high technical level – 2 persons

Occupational Safety Officer at professional level and senior professional level – 9 persons

Occupational Safety Officer at supervisory level – 0 persons

Occupational Safety Department Manager – 1 person

Total 12 persons

In 2018, the Company's statistics on work accidents in all projects were as follows:

Minor accidents (stop working for less than 7 days per person) – 0 persons

Major accidents (stop working more than 7 days per person) – 2 persons

Damaged properties – 0 persons

2.1.4 Undelivered Projects

As of December 31, 2018, the Company had 17 undelivered projects in the total project value of Baht 3,925.43 million as detailed below.

Unit: Million Baht

Project	Completion Date	Total Project Value	Undelivered/ not performed yet
1. Central Festival Phuket, Main Parking Building	1 Dec 2017	589.77	6.18
2. New Drop Off, Samitivej Hospital, Srinakarin	31 May 2018	31.40	0.41
3. Medical Research Center, Faculty Of Medicine, B	14 Sep 2018	892.85	7.40
4. Office Building Of Hat Yai Airport	23 Oct 2018	268.85	7.04
5. New In Patient Building, Rangsit General Hospital	16 Nov 2018	194.09	39.55
6. Bukis Phuket (Decathlon)	25 Dec 2018	38.05	2.51
7. Pattani Green Power Plant	30 Jun 2019	1,296.95	975.57
8. Central Vellage (Samutprakarn)	12 Jul 2019	238.32	210.61
9. Novotel Sriracha Marina Bay Hotel	31 Jul 2019	292.00	76.75
10. Intrarat Hospital	20 Aug 2019	523.36	291.82
11. Private concrete road (Srakaew)	31 Aug 2019	48.00	47.05
12. The Base Central Phuket	31 Dec 2019	443.93	423.17
13. In Patient Building For 298 Beds, Phatthalung Ho	14 Feb 2020	279.81	231.21
14. TPCCH Power Plant 1	31 Mar 2020	666.20	615.04
15. TPCCH Power Plant 2	31 Mar 2020	653.56	615.91
16. Jomtien Hospital Building (Sriracha, Chonburi)	1 Jul 2020	303.74	286.28
17. Residential Building For Government Officer (Nar	29 Jun 2021	100.00	88.94
		6,860.88	3,925.43

2.2 Property Development Business

TPC Asset Company Limited was established on May 25, 2011 in which Thai Polycons Public Company Limited holds 99.99 percent of shares. Its initial registered capital was Baht 10 million and has been increased to be Baht 230 million at present. TPCA operates the business of land and houses for sale. It starts from sales of land and houses, and it now becomes the project developer and project owner.

2.2.1 Product or Service Features

At present, TPCA carries out the land and houses development projects, sales of land and houses, and owns many land and house projects. Its development projects shall be based on the conventional construction method. As a result, the house structure will be full of quality whereas other decoration and architecture work can be added attractively and relevantly to the design. Every construction step is carefully inspected to be in line with all criteria and regulations so that each quality, accepted, and standardized house unit can be

delivered to every client. TPCA aims at the steady growth. At first glance, TPCA would like to make the product brand be recognized in the market. It has determination to build the quality products and service giving the highest satisfaction to clients.

The current projects operated by TPCA include Greenwich Town Home Ramintra. It is located at 988, Ramintra Road, between Km. 12-13, close to Makro Ramintra in the project area of 16 Rai-3 Ngarn-98 Square Wah with a project value of Baht 740 million in total. This project consists of 174 units of 3-storey modern town homes under the usable area of 193 Square Meters per each. At present, all project utilities and house construction work have been absolutely completed and approximately 99.5 percent of house units could be sold. It was anticipated that this project could be closed by 2019.

Another project is Greenwich Prime Expressway Ramintra-Hathairat with a project value of Baht 370 million. It is located on an area of 20 Rai. This project consists of 94 units of 2-storey single detached houses with a usable area of 125-180 Square Meters per each. The project sale started at the end of 2016, and, up to now, about 78.7 percent of houses have been sold. The project revenue would be continuously recognized, and it was anticipated that this project could be closed by 2019.

2.2.2 Market and Competition

For real estate market trends in 2019, it is expected that, during the first quarter of 2019, the market will continue to be so active since the end of 2018 from much transfer of housing ownership before the market must have an adjustment to the housing loan control measure announced by the Bank of Thailand (BOT) to raise the standard of housing loans granted by financial institutions. Such preventive measure aims at taking care of systemic risks, reducing bad debts in the property sector, and signing the speculation that is likely to increase. This measure is effective from April 1, 2019 onwards, which will affect individuals who pay by installments for two houses or more simultaneously, as well as those who buy a house priced Baht 10 million or more whereas a minimum down payment of 10-30% is required. After the second quarter of 2019, the market may be less active.

The development of residential projects next year continues to focus on areas accessible by the train network, especially the Orange Line, the Blue Line, and the extension of the Green Line that is currently in progress. The market will expand to the outskirts of Bangkok, with the trains making it convenient for people to travel into the city. As for the

single home and townhouse market in the outskirts of the city, the outlook is that the rate of expansion will be low, with traffic issues accounting for the main factor hampering growth. Also, single home and townhouse projects are generally far from the train lines. There are very few plans to build new roads to accommodate the number of cars and ease traffic issues. The condominium market thus has an advantage to being close to the train lines; moreover, they don't require huge plots of land for development.

Business Situation

For the 3-storey townhome in 2018, one unit was booked; one unit was transferred, and only one unit was unsold. Over 99% of units have been sold and transferred, and this project would be closed soon.

Regarding single detached houses, in 2018, there were 48 pre-sale units and 27 units have been transferred. If compared with 2017, the total units pre-sold decreased for 45%. However, the demand on single detached houses still existed. The Project always examines the credit and pre-approval before making a contract with each client, and also advises the client on credit revision while waiting for the completion of house construction.

Table showing the number of pre-sold units and the remaining units after the cancellation of pre-sale for Greenwich Town Ramintra

Transactions	2018			2017		
	1st Half	2nd Half	Total	1st Half	2nd Half	Total
Number of pre-sold units	0	1	1	14	15	29
Number of remaining units after the cancellation of pre-sale	2	1		12	2	
Number of transferred units	0	1	1	7	16	23

Table showing the number of pre-sold units and the remaining units after the cancellation of pre-sale for Greenwich Prime (Single Detached House)

Transactions	2018			2017		
	1st Half	2nd Half	Total	1st Half	2nd Half	Total
Number of pre-sold units	31	17	48	46	42	88
Number of remaining units after the cancellation of pre-sale	23	20		15	13	
Number of transferred units	18	9	27	18	24	42

Note: Cancellation means a client changes his/her mind or is not approved by a financial institution.

2.2.3 Supplies of Products or Services

1) Purchase of land

Land is a core asset for the business operation of TPCA; it accounts for 30-40 percent of its total cost. Therefore, TPCA greatly focuses on land acquisition for its projects. Each plot of land must have potential and be in the urban area so that, after the project development, a particular project can be sold and closed in a short period. Before each land acquisition, TPCA will conduct a feasibility study by surveying the market condition and competition as well as clients' demands in that target area for market opportunities of TPCA. Then, TPCA will proceed with negotiations for land acquisition. In most cases, TPCA acquires the land through real estate agents or it may contact a land owner directly by comparing between the selling price and the appraisal price or market price that is appropriate. TPCA has no policy to purchase any plot of land to be stocked for long before starting the project development.

2) Supply of sub-contractors and construction

TPCA selects many medium-sized and small-sized sub-contractors by fixing wages including labor cost and construction materials for them. TPCA controls the work quality and construction cost to meet the criteria it determines. This helps mitigate its risk of sub-contractor shortage.

2.1) TPCA mostly helps negotiate about prices of construction materials with the construction material suppliers for sub-contractors so that such offered prices are fixed for the sub-contractors for a period. The sub-contractors will purchase the materials from the suppliers who have negotiated with TPCA. As a result, the sub-contractors engaged by the Company are able to control their cost better.

2.2) At present, there are several sub-contractors who have continuously provided their construction service to TPCA. If any sub-contractor is unable to take on any project, the other sub-contractor can be replaced promptly.

3) Delivery of work

TPCA makes payments for construction works to each sub-contractor based on the work progress as specified in the construction contract and after the work inspection together with the client only. A payment to the sub-contractor is deductible from the retention money in each period for 2.5-5.0 percent of work value delivered. The sub-contractors engaged by the Company are the medium-sized construction companies with good experience and expertise in construction, good and quality service, secure financial status, and good commercial credit; therefore, their work meets the good quality to a certain extent. TPCA also assigns a team to inspect the construction quality, arranges training courses for staffs in charge of controlling the construction work and construction engineering of the Company and those sub-contractors, and provides the manual on construction standards and house inspection standards. For monitoring the construction progress, the Company's construction controller will regularly report the work progress. Any construction delay will be solved in time. If an old sub-contractor fails to deliver its work as scheduled, a new sub-contractor will be replaced immediately.

2.3 Holding Shares in Companies Operating the Production and Sales of Electricity Generated from Renewable Energy (Holding Company). This business has been operated by TPC Power Holding Public Company Limited.

2.3.1 Product or Service Features

TPOLY holds 41.26 percent of shares in TPC Power Holding Public Company Limited (TPCH) that is a holding company making investments in companies that operate the production and sales of electricity generated from renewable energy, and providing other related supporting services for operations of its subsidiaries. TPCH has made investments in 11 companies with plans for the production and sales of electricity generated from renewable energy, that is, 1 of them had a plan for the production and sales of refuse derived fuel (RDF). The main revenues of TPCH derive from dividends from holding shares in other companies as well as other revenues from providing the supporting services for

operations of its subsidiaries. As of February 9, 2018, there were 6 biomass power plants that have already achieved their commercial operations, including:

1. CRB – Commercial Operation Date on March 15, 2013
2. MWE – Commercial Operation Date on October 12, 2015
3. MGP – Commercial Operation Date on April 8, 2016
4. TSG – Commercial Operation Date on October 3, 2016
5. TSG – Commercial Operation Date on July 7, 2017
6. SGP – Commercial Operation Date on February 9, 2018

The subsidiaries and other jointly controlled entities of TPCH have operated the business of production and sales of electricity generated from biomass and municipal solid waste to be sold to the government sector in accordance with a policy of the Energy Policy and Planning Office, Ministry of Energy, which encourages the production and use of electricity as generated by alternative energy. In this regard, such businesses are supported by the government in forms of adder rates, Feed in Tariffs (FiT) scheme, and other tax incentives, etc. The significant details about power plants that have been granted the operation licenses in 11 projects in 11 subsidiaries (*excluding BBRP as it has been on process of business shutdown*) are as follows:

Company	Shareholding in TPOCH (percent)	Location of Power Plant Project	Type of Fuel	Total Production Capacity/ Production Capacity for	Project Status
				(megawatts)	
Already in commercial operations					
1. Chang Raek Biopower Co., Ltd. (CRB)	73.12	Amphoe Thung Song, Nakhon Si Thammarat	Biomass from rubber tree and palm oil	9.9/9.2 FiT	COD on March 15, 2013
2. Maewong Energy Co., Ltd. (MWE)	85	Amphoe Mae Wong, Nakhon Sawan	Rice husk and woodchip	9.0/8.0 FiT	COD on October 12, 2015
3. Mahachai Green Power Co., Ltd. (MGP)	46.0*	Amphoe Muang, Samut Sakhon	Biomass from coconut tree	9.5/8.0 FiT	COD on April 8, 2016
4. Thungsung Green Co., Ltd. (TSG)	65	Amphoe Thung Yai, Nakhon Si Thammarat	Biomass from rubber tree and palm oil	9.5/9.2 FiT	COD on October 3, 2016
5. Phatthalung Green Power Co., Ltd. (PGP)	60	Amphoe Pak Phayun, Phatthalung	Biomass from rubber tree and palm oil	9.9/9.2 FiT	COD on July 7, 2017
6. Satun Green Power Co., Ltd. (SGP)	51	Amphoe Khuan Kalong, Satun	Biomass from rubber tree and palm oil	9.9/9.2 FiT	COD on February 9, 2018
Under construction					
7. Pattani Green Co., Ltd. (PTG)	65	Amphoe Nong Chik, Pattani	Biomass from rubber tree and palm oil	23/21 Adder	Under construction. Completion expected by Quarter 4 of 2019
8. TPOCH Power 1 Co., Ltd. (TPCH1)	85	Amphoe Muang, Yala, Yala	Biomass from rubber tree and palm oil	9.9/9.2 FiT	Under construction. Completion expected by Quarter 1 of 2020
9. TPOCH Power 2 Co., Ltd. (TPCH2)	85	Amphoe Muang, Yala, Yala	Biomass from rubber tree and palm oil	9.9/9.2 FiT	Under construction. Completion expected by Quarter 1 of 2020
10. TPOCH Power 5 Co., Ltd. (TPCH5)	89	Amphoe Muang Narathiwat, Narathiwat	Biomass from rubber tree and palm oil	6.3/6.3 FiT	Under construction. Completion expected by Quarter 2 of 2020
Under project development					
11. Siam Power Co., Ltd. (SP)	50.0*	Amphoe Sai Noi, Nonthaburi	Municipal solid waste from	9.5/8.0 FiT	Has submitted the proposal for sales of electricity (Aor. 1), and RorNgor.4 has been approved by all related agencies.

*Jointly controlled entities

**Total production capacity exceeds the production capacity for sale and purchase. The power plant can produce the electricity for its internal use.

Status of licenses and significant contracts of TPCH, subsidiaries and jointly controlled entities

Company	Letter of Intent Notified	PPA with PEA	Permit for Factory Operation (Ror.Ngor.4)	BOI Certificate
1. Chang Raek Biopower Co., Ltd. (CRB)	Already notified	Already executed	Already granted	Already granted
2. Maewong Energy Co., Ltd. (MWE)	Already notified	Already executed	Already granted	Already granted
3. Mahachai Green Power Co., Ltd. (MGP)	Already notified	Already executed	Already granted	Already granted
4. Thungsung Green Co., Ltd. (TSG)	Already notified	Already executed	Already granted	Already granted
5. Phatthalung Green Power Co., Ltd. (PGP)	Already notified	Already executed	Already granted	Already granted
6. Satun Green Power Co., Ltd. (SGP)	Already notified	Already executed	Already granted	Already granted
7. Pattani Green Co., Ltd. (PTG)	Already notified	Already executed	Already granted	Already granted
8. TPCH Power 1 Co., Ltd. (TPCH1)	Already notified	Already executed	Already granted	Already granted
9. TPCH Power 2 Co., Ltd. (TPCH2)	Already notified	Already executed	Already granted	Already granted
10. TPCH Power 5 Co., Ltd. (TPCH5)	Already notified	Already executed	Already granted	Already granted
11. Siam Power Co., Ltd. (SP)	-	-	Already granted	Application for the Certificate submitted

2.3.2 Market and Competition

2.3.2.1 Competitive Strategy. The business operation of TPC Power Holding Public Company Limited, which involves 12 subsidiaries whose 6 power plants have already begun their commercial operations, 4 power plants have been under construction, and 1 power plants have submitted applications for license, is the production and sales of electricity to PEA and EGAT under the long-term PPAs with PEA and EGAT that would purchase all units of electricity generated, but not exceed the quantity as stated in the PPAs made with PEA and EGAT under a condition on the sale price that must be the market price

and at the same rate paid by PEA to other power producers who have made the PPAs in the same manner. There are 2 electricity purchase systems:

1. Adder system – A power project shall be subsidized with an adder of Baht 0.30 per unit during 7 years of generating electricity from biomass, and of Baht 1 per unit during 7 years for a power plant project located at 3 southern border provinces and 4 special districts at Songkhla.

2. Feed in Tariff (FiT) system – An electricity price shall be the rate announced by EGAT and a power project shall be subsidized with FiT premium of Baht 0.30 per unit for a period of 8 years for the generation of electricity from biomass, and of Baht 0.5 for the whole project term for the power plant project located at 3 southern border provinces and 4 special districts at Songkhla.

Regarding an acquisition of the Power Purchase Agreement (“PPA”) for biomass fuel, the Provincial Electricity Authority (PEA), at present, purchases the electricity generated from biomass fuel based on price. The Energy Regulatory Commission shall fix the electricity purchase quota in each area, and the purchase timeframe based on price in each of its announcement for purchase of electricity generated from biomass.

However, the uncertainty of policy formulated by the government sector regarding the targeted production capacity of biomass power plants in accordance with the Alternative Energy Development Plan has driven TPCH to plan for expanding its biomass power plant business to other countries, especially to Southeast Asia region. Some surveys and feasibility studies have been already conducted in some potential countries like the Republic of the Union of Myanmar.

Nevertheless, for the generation of biomass-fuelled electricity, the subsidiaries need to acquire some fuels in an appropriate quantity and price to enhance the highest revenue and profit. As TPCH and its subsidiaries own no fuel sources, and must purchase such fuels from other suppliers so they may have to compete with other power producers to approach the same fuel sources. Therefore, TPCH formulates certain substantial strategies for its competitiveness and the leading biomass-fuelled power producer in Thailand and this region. The significant strategies implemented for current and future projects of TPCH and its subsidiaries are as follows:

1) Business alliances to approach fuel sources: During the feasibility study of each project, TPCH defines a principle of developing its power plant in any area where it is

highly likely that it contains sufficient core and alternative fuel sources to feed such power plant throughout the year and project term. TPOCH would study all related information, and survey any fuel sources around the project whether that fuel could be delivered to the project cost-effectively or not. TPOCH has been conducting the research study, and growing other alternative plants to support TPOCH's management of fuel sources in respect with fuel quantity and cost.

2) Business alliances with business expertise: EnBw is one of key business alliances of TPOCH. EnBw holds a secure financial status and expertise in the international energy business. As one of the largest power production and distribution companies in Germany and Europe, EnBw could transfer its knowledge and experience in operating many power plants to TPOCH.

Another key business alliance is VSPP, a major shareholder of CRB by holding 16.88 percent of shares. VSPP has operated CRB and TSG power plants under the Operation and Maintenance Agreement whereas VSS has gained long experience in management and investments in biomass power plant projects, has had good relationship with communities around those power plants, and has been able to supply the fuel around power plants sufficiently and consistently.

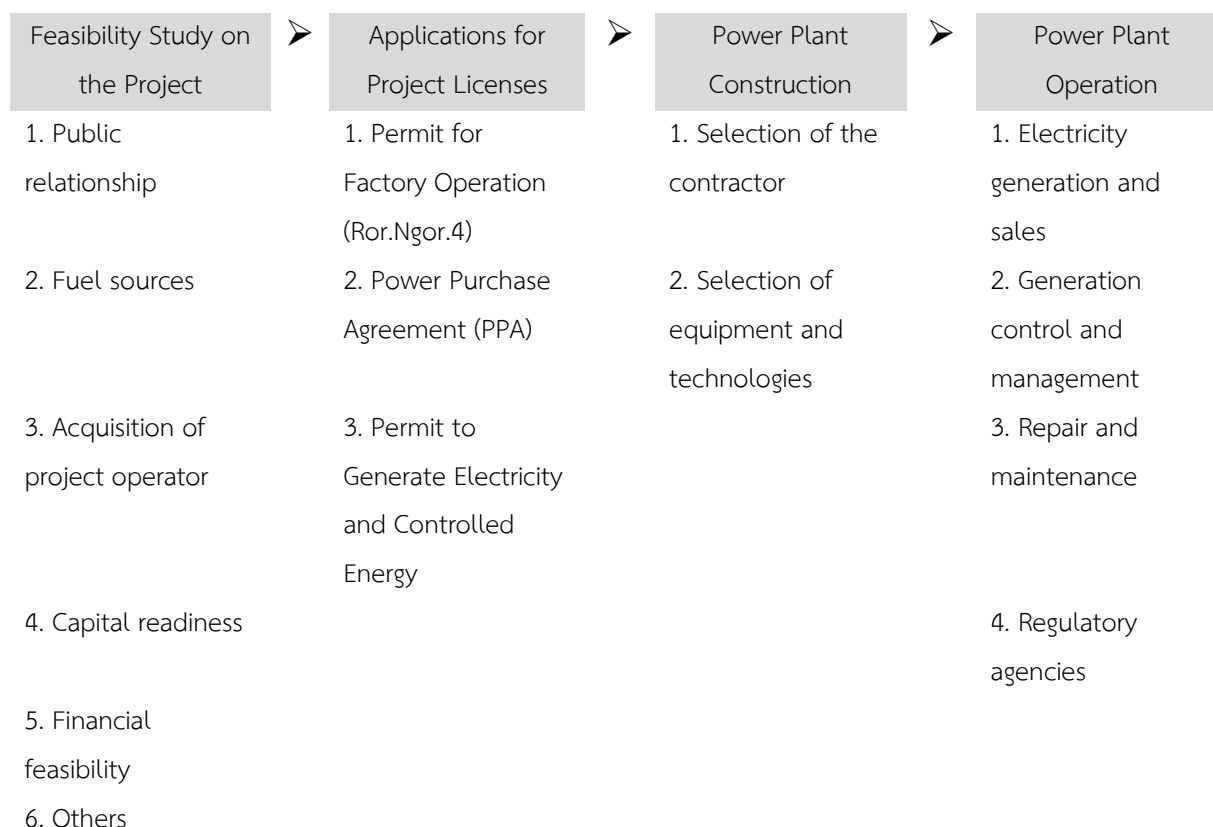
3) Selection of creditable and acceptable technologies. This would affirm key stakeholders, e.g. client or PEA, financial institutions granting loans, and surrounding communities that the subsidiaries' power plant projects hold potential to produce and sell the electricity to PEA regularly and efficiently, which results to the consistent revenues, and better opportunities for repayments as scheduled. The generation process that is acceptable, friendly to the environment, and harmless to any communities would make the power plant projects to be developed by TPOCH in the future be accepted by these stakeholders who would further support the project success in the future.

4) Management team with engineering skills and expertise and experience in power plant projects, which would enable TPOCH to develop and manage such projects efficiently.

2.3.3 Supplies of Products or Services

The core business of TPC Power Holding Public Company Limited is to make investments in other companies operating the business of electricity generation and sales.

TPCH is involved from conducting a feasibility study before making decision on the project development and investment in the form of establishing a new company for the new project. TPCH may make an investment for 100 percent of stakes or it may acquire any business alliances whose investment strategy is relevant to the Company. The steps of project research and development up to the generation and sale of electricity are illustrated below.



Apart from carrying out the power plant project development pursuant to steps shown above, TPCH may consider making investments in other power plants that have been developed or operated already by acquiring their shares or assets. Investments by TPCH shall be in line with its investment policy and conditions determined. TPCH shall conduct a project feasibility study and consider other key factors affecting such project before proceeding with the development and investment in each project.

2.4 Trading Business for Local and Foreign Products

2.4.1 Product or Service Features. TPOLY establishes a subsidiary, TPC Bangkok Supply Company Limited (“TPCB”), and holds 99.99 percent of shares in it. This subsidiary has operated the business of trading, importing, and exporting all types of local and foreign products since 2013. TPCB has conducted the feasibility studies, and acquired certain product sources. These products may be divided into:

1) Products for construction work

As Thai Polycons Public Company Limited has purchased a large amount of construction materials from local and foreign sellers in each year; it has an idea to import the good-quality and competitive-pricing construction materials for the local market and neighboring markets. At present, TPCB is an agent of distributing the cement and aerated brick manufactured by Siam City Cement Public Company Limited, and it now takes steps to be a distributor for other products.

2) Products for biomass power plants

For biomass power plant business, a huge amount of raw materials used as biomass fuel is needed. To secure the feeding of such raw materials, and to reduce the production cost in the long term, TPCB has an idea to sell the biomass fuel to the power plants of its subsidiaries and other general power plants.

3) Other products

TPCB has a plan of trading other products. It is on the process of feasibility study and project planning.

2.4.2 Market and Competition

To ensure that the products are competitive, the Company focuses on selecting the quality and cheaper products, which must be purchased from local and foreign manufacturing plants. These plants must have the good production standard and high creditability. TPCB always analyzes its competitors’ strength and weakness so that the product features would be developed to fit the market.

2.4.3 Supplies of Products or Services

The procedure of supplying the products or services is as follows:

1. Product selection
2. Search for product sources
3. Request for product sample and test, price negotiations, and payment conditions

3. Risk Factors

The risk factors in business operations of TPOLY, subsidiaries, and joint ventures may be categorized below.

3.1 Construction Service. Thai Polycons Public Company Limited has mainly operated the construction business with long experience over 30 years. It provides various types of construction service for both government and private sectors. It may act as a main contractor or a sub-contractor, and it may acquire a project via auction or bidding, e.g. high-rise residence building, warehouse, industrial plant, large-sized office building, shopping mall, education building, hospital, and biomass power plant, which also involves internal and external decorations.

TPOLY prioritizes the risk management in business operations, either internal or external factors materially affecting its business. A risk management system and a monitoring and internal control system have been set up to control certain risk factors as described below.

3.1.1 Risk from changes in government policies, rules and regulations, and other laws relating to the Company as well as revenue fluctuations. TPOLY has mainly operated the construction business; its business growth, in general, depends on the government policy and economic schemes driving investments by the private sector, as well as the national development plans, e.g. telecommunication infrastructure development, water source development plan, and promotion to the real estate business. The economic growth and government expenditures may not meet the projection. The financial crisis or political instability may occur in the future. The factors that may adversely take effect to the national economy in the future include:

- Political instability, terrorism, or military conflicts in several countries
- Continuous or more violent insurgency in southern border provinces of Thailand
- Natural disaster and catastrophe

- Long-term inflation or higher interest rates in the region
- Changes in taxation
- Lack of finance or other types of fund sources, which result to the dropping demand on products and services of regional entrepreneurs
- Fluctuations of foreign exchange and oil price
- Highly fluctuating global economic and financial system

Subject to aforesaid risks, TPOLY focuses on its potential to win the bids consistently. The Company shall offer the construction price most relevantly to the work quantity, and deliver the quality work punctually. The Company's construction work is normally guaranteed for 1 year upon the project construction completion. These factors make many clients trust TPOLY, and list TPOLY on top contractors to be selected for future projects. These clients also recommend TPOLY to other clients. However, the Company has tried to mitigate a risk of absolute reliance on the construction business by making investments in other businesses such as energy business, property development business, trading business, and others to reduce business fluctuations.

3.1.2 Risk from terrorism in three southern border provinces. TPOLY, currently, has 2 construction projects on the southern provinces; namely, Yala, and Narathiwat, in which TPOLY has gained some tax privileges. However, the said projects may be delayed and not be delivered as agreed in the contract caused by a shortage of construction workers due to unrest situation there. As the Company has a policy of not taking on any construction projects in the terrorists' target zones; thus, its construction projects have never been attacked by terrorism. Nevertheless, for the sake of safety among workers, employees, and construction sites, TPOLY determines some additional security measures, and coordinates with all related government authorities at three southern border provinces to closely monitor the situations there. At each construction site of the Company, a ditch is dug so widely that no one could jump over it. Each construction site is also encircled by barbed wire, and the lighting system is turned at night. The labors in the southern border provinces would not be hired in order to prevent some disguising terrorists, so the Company would employ the workers from the central region at a rate 50 percent higher than the normal one. Since 2005 up to now, the Company has proceeded with the construction of Yala biomass power plant, and it has never experienced any terrorism or labor shortage there.

3.1.3 Risk from tougher competition. At present, the construction industry confronts tougher competition while the new projects depend on bidding. When a bidder's qualifications are accepted, a price proposal would be considered by the project owner. The Company may confront harsher competition for construction projects among local and international construction companies from ASEAN Free Trade Area, which may take an adverse effect to the Company's business competition, financial status, operating performance, business opportunities, and returns to investors. On the contrary, this event may enable the Company to acquire new potential business alliances to approach new fund sources and technologies.

3.1.4 Risk from business expansion based on investments and project development length. Business development involves the project study and development in areas of energy, real estate, and trading. This business development aims at diversifying certain business risks from absolutely relying on the construction business. The Company must step into new markets and new clients, and try to generate the long-term sustainable revenues. However, the business investment during the initial stage of project development may be insecure due to several factors. Investments are essential, and it takes so long to gain the anticipated returns, which may be a potential risk.

3.1.5 Risk from fluctuation of construction material prices and shortage of construction materials from more intense tendering of bidding prices. To gain a good gross profit, the construction project management must depend on the project cost estimation and control of actual cost to be in line with the anticipated budget. The cost estimation is subjected to the construction material prices, transportation cost, and wage, which would be fluctuating by the degree of demand and supply in the economic situation. The Company manages the said risks by taking the following actions:

- For a construction contract with a provision on escalation factor (K), the construction price would be revised by such K value, which shall be adjusted by any changing production cost. Although this may not cover all increasing raw material cost and wages, it could support the increasing prices of raw materials and wages; therefore, the Company's construction cost is less affected.
- In case of a construction contract with a fixed construction cost whereas K value is not specified and this case is usually found in the private

business, the Company has already estimated the possible increase of construction material prices in the overall project value.

Raw materials used in a construction project are the Company's overall cost, which are commodities, so their prices and quantity are up to the domestic and global markets. Some raw materials, especially cement and steel, may be out of stock during the high economic growth; the Company may be in trouble to find out some raw materials in a reasonable price. The main raw materials for construction are steel and cement. TPOLY directly orders them from certain major local manufacturers and distributors. For the construction business, the variation of construction material prices definitely affects the Company's construction cost and operating results. A construction company would set up its construction cost in advance based on the scope of work; if the construction material prices increase during the construction process while those construction materials have not been purchased yet, it would be unable to limit the construction cost as per its estimation. This may take an adverse effect to the company's operating performance and financial status.

However, TPOLY has purchased the steel bar from such steel bar manufacturing plant for long and consistently whereas TPOLY has never had any outstanding payments so it has a good relationship with this steel bar manufacturer. TPOLY has always planned for the use of steel bar and purchased it in advance. It has never experienced the lack of steel bar either when it is out of stock or in the normal situation.

3.1.6 Risk from errors in the revenue projection and cost as contracted because of an additional scope of project. The Company may have some additional work as the client changes the scope of work from that indicated in the project plan whereas both parties have not yet agreed for the exact service scope and cost. The increasing work value may not be suitable for the actual work value, or not cover the rising cost and expenses if compared with such additional work quantity and service duration. Any subsequent change in the scope of work may lead to the contract argument and business dispute, which take effect to the Company's business operation. The Company's operating result may not be in line with its projection due to some increasing cost from an unbilled amount of money, which is called in accounting as "unbilled receivable" as shown in the Company's Statement of Financial Position. This not only impairs the Company's financial status, but also its business opportunities. However, the Company mitigates this risk by carrying out the project

more carefully. The Company also has a business negotiation with each client in advance to minimize any potential business dispute.

3.1.7 Risk from no receipt of construction service payments from clients or project owners. TPOLY has provided the construction service to both private and government sectors. For construction projects provided to the government sector, the Company has no risk of not receiving the cost of construction. However, for construction projects provided to the private sector, the total construction cost may not be recognized. If a client in the private sector encounters the financial difficulty until it is unable to pay for the cost of construction, the Company's operating result will be exactly affected.

TPOLY recognizes the said risk. Its Management always takes into account the creditability and financial status of each client before tendering the bid. TPOLY has a policy to take on any construction projects from clients with creditability and good financial status. Most clients of TPOLY in the private sector are well-known companies with a good financial status.

3.1.8 Risk of human resources and management. A vision of the Board of Directors and Management of TPOLY in respect with human resource management is to allow all company employees to express their competence. This is a core concept driving them to have self-esteem and determination to use their knowledge to develop the organization securely and sustainably. This is to root the accountability in all stakeholders, and entrepreneur spirit.

TPOLY has a proactive plan in recruiting its personnel from educational institutes where new graduates are qualified and relevant to the Company's requirements. This approach helps acquire young and energetic generations who have knowledge and abilities, and new viewpoints and ideas to work with the Company while they are eager to develop themselves and grow with the Company. These graduates would be trained theoretically and practically so that they would have both knowledge and experience to grow and smart as they want.

Now, the Company uses Microsoft Dynamics AX (ERP) in its management; therefore, all data of each department is put in an on-line system. As a result, data searching is easy, convenient, accurate, and rapid. This helps reduce the paper use, expenses, document collection or document loss in case of staff resignation.

3.1.9 Risk from shortage of labors and sub-contractors. The Company's ability in controlling wages and project management depends on its ability in acquiring and retaining the engineers, architects, and technicians who have the appropriate qualifications and experience. During the flux of construction works, these personnel may go short. Thus, the Company may be unable to employ some specialized personnel and other workers sufficiently, either through direct employment or through sub-contractors in the future. The Company is neither able to guarantee that the cost of employing some specialized personnel or other workers would not exceed its estimated cost. This may negatively give the material effect to the Company's business, financial status, operating performance, business opportunities, and returns to investors.

3.1.10 Risk from delayed delivery of work, which may force TPOLY to compensate some damages from the breach of the contract. In making a construction service agreement between the Company and a client, the construction period would be specified explicitly. If the work could not be delivered on schedule, the Company must pay for the damage and fine as specified in the contract. The delayed project also induces higher wage expenses than expected. Additionally, for a construction project for the private sector, a client may change the scope of construction work, which undeniably affects the construction period. TPOLY also has a risk in negotiating for an additional construction price because the cost of construction for such additional work is not stated in the contract. This may adversely affect the Company's operating performance.

However, before accepting each construction project, the Executive Board of TPOLY always takes into account the entire undelivered construction works and adequacy of manpower so that it will be able to manage all projects efficiently and to deliver each project on schedule. TPOLY recognizes the management risk; it defines a working guideline to prevent any potential defects. To elaborate, ISO 9001:2008 is used to sustain the operation standards at the Company's head office and all projects. The risk from general project delays may come from clients, e.g. late submission of construction area, approval process for various matters, etc. These delays result to the construction period and expenses. Some delays may be provoked by the contractor, e.g. lack of construction materials. In this regard, TPOLY makes the construction material purchase agreement in advance. Some delays may come from other reasons, e.g. natural disaster. Previously, TPOLY was successful to prolong the construction period.

3.1.11 Risk of not recognizing the project value as contracted or the revenues based on the value of projects on hand. The project value as contracted means the amount of revenues to be gained under provisions set forth in a construction service agreement if such provisions are complied with completely. The project value on hand indicates the work quantity to be completed by the Company. However, the Company may not be able to recognize the project value as contracted or the value expected from the project value on hand or it may recognize the project value, but the project is lower than the estimated amount. In case that a project on hand is suspended or the scope of work is reduced, the project value must be cut as well. The fall of revenues from the cash flow may materially worsen the operating profit from the project value on hand. If a client cancels the project, the Company may receive some compensation, but it has no right to have the total amount of revenues, which show the project value on hand. The project cancellation or delay as shown the project value on hand may adversely affect the Company's business, financial status, operating results, and returns to investors.

3.1.12 Risk from setting aside additional provisions for doubtful accounts and recognizing higher loss from the Company's declining investment value, which may adversely affect the Company's business, financial status, operating results, and business opportunities.

3.1.13 Financial risks

(1) Risk from inadequacy of working capital

Liquidity risk or fund raising risk is a risk to which the Company may experience in mobilizing the fund adequately and timely in order to comply with the obligations as specified in any financial instruments. Liquidity risk may occur when a company is unable to sell its financial assets in time at a price close to the fair value.

Interest rate risk is a risk deriving from changes of interest rates that may occur in the future. Most loans granted by financial institutions to the Company are the short-term loans, so the interest rate risk could not cause damages to the Company. In addition, the Company would request for changing the borrowing conditions or it may seek for other new financing sources with a low interest rate to replace the old ones.

Credit risk. The Group of Companies has the credit risk relating to its account receivables. However, for any account receivables that may have the payment

problem, the Company's Management has the policy to record the allowance for doubtful accounts sufficiently to cover such loss.

Subject to the prosperity and growth of TPOLY, it has taken on more large projects. TPOLY needs higher amount of working capital in its business for various construction projects; this may lead to a risk in case that the working capital is insufficient, and may impact the current construction projects. TPOLY prevents and manages this risk via financial management by careful liquidity management. To elaborate, the schedule of payments to raw material suppliers must be consistent with the schedule of payments made by project owners. TPOLY also plans to procure the raw materials and equipment relevantly to such payment schedules in order to reduce the capital spending, and maintenance cost, and financial cost.

(2) Risk from providing financial supports to subsidiaries. For business necessity, TPOLY has provided several types of financial supports to its subsidiaries such as granting loans to subsidiaries, or extending guarantees for the parent company, etc. These may cause the risk in case that the operating results of such subsidiaries miss the target or these subsidiaries encounter the financial liquidity problem until they are unable to repay debts when due or they have a default with a bank. These cause the Company to be responsible as the guarantor. In recognizing this risk, the Company defines the precise financial supporting procedures and approval limit when it must give any financial support to its subsidiaries.

(3) Risk from spinning off a subsidiary operating the biomass energy to be listed on the SET. Since TPOLY has operated the construction business over 29 years; it recognizes the industry risk and revenue fluctuation from the construction service as impacted by the economic system, state policy, and lack of labor. Therefore, TPOLY has made investments in the biomass business to enhance some persistent income. Nevertheless, the energy business needs high investment, but the payback period is approximately 10 years. However, TPOLY realizes this business opportunity. To expand this energy business, TPOLY decided that TPC Power Holding Public Company Limited had to be listed on the SET for fund-raising while TPOLY as a construction company continues obtaining benefits from the energy business prosperity.

As this subsidiary is a holding company; its core income is dividends to be paid by its subsidiaries and jointly controlled entities, which are up to the operating results they

would achieve. Up to now, this subsidiary has made investments in 11 companies. It also aims at making more investments in the business of electricity generation and sales from renewable energy, so it is likely that this subsidiary may have more subsidiaries in the future. However, investments in each project, either present or future, contains some risks, which may adversely affect the business of electricity generation and sales from renewable energy as operated by the Group of Companies.

3.1.14 Risk of no expected returns from investments in subsidiaries. TPOLY assigns its Management to regularly monitor the operating results of all subsidiaries in which it has made investments. The operating performance summary must be submitted to the Company's Management in every 2 weeks, as well as the analysis report comparing the actual returns with the anticipated returns in order to ensure that every business invested achieves the operating results and work efficiency as expected. Besides, TPOLY defines certain measures and operating guidelines to prevent this risk as described below:

- Formulate the management policy in subsidiaries. The Company's directors and/or executives shall be delegated to be directors in its subsidiaries. The number of directors/executives must not be less than the proportion of shares held in these subsidiaries or joint ventures (as the case may be). TPOLY also appoints its representatives to be the top management in these subsidiaries.

- Assign the Company's internal audit to regularly inspect the business activities of these subsidiaries in accordance with the annual audit plan to ensure that they hold adequacy and efficiency of the internal control system, and to report the audit results to the Company's Audit Committee.

3.2 Property Development Business

3.2.1 Risk of construction material prices. The fluctuation of construction material prices is an external and uncontrollable factor. For example, the fluctuating oil prices in the global market always take effect to the production cost of construction materials, which may be higher or lower according to the government announcement. This is a risk factor extremely affecting the efficiency of cost management and profitability. TPOLY manages this risk by studying and analyzing the tendency of prices of construction materials and cost of construction as resulted by changing fuel prices, and by closely monitoring the crude oil prices in the global market. TPOLY would fix the construction material prices in advance with its major construction material suppliers for all projects so that the sub-

contractors could buy the construction materials from these suppliers at the negotiated prices. This method helps mitigate the fluctuating prices of construction materials and oil to some extent, and then the construction cost could be controlled. To prevent the existing construction material suppliers to raise the price, TPOLY sets up a working team to monitor the construction material prices and procure the spare parts from other new manufacturers so that it will be able to fix the cost of construction timely and competitively.

3.2.2 Potential and working background of sub-contractors. TPOLY has employed several sub-contractors with good qualifications and financial stability to jointly provide the construction service. Since the company establishment, TPOLY has accumulated a valuable experience and qualified working team to provide the construction service by itself in order to create trust and reliability on the Company's management. This helps minimize the delayed and unqualified projects. TPOLY would fix a lump sum payment, which includes wages and construction material prices, for sub-contractors whereas it would control the work quality, work duration, and cost of construction to be in line with the Company's estimation.

3.2.3 Quality and standards of construction work. These issues have been always prioritized by TPOLY. TPOLY sets up a working team to develop and study the construction system and to investigate whether any construction service part should be improved or not so that TPOLY could meet the anticipated goals. TPOLY strictly controls its construction quality and standards, service duration, and cost that must be in conformity with the preset schedule. In this regard, ISO is used in the Company's construction works; this helps reduce the duplicated use of corporate resources, and shift its competitiveness, which leads to universality. TPOLY also has a central quality control team in charge of inspecting the work quality and quantity based on its construction models and construction standards, which lead to an efficient and proficient operation. Another working team is also established to find out the weakness of general construction system; this information would be integrated for the Company's construction development. Nevertheless, since the construction and project development have been usually and critically affected by certain external factors, e.g. lack of labor, rising of minimum wage, rising price of construction materials, etc., TPOLY applies several strategies to minimize these problems.

3.2.4 Risk in the shortage of sub-contractors. TPOLY has operated the construction business for long; it has tied the good relationship with many labors and minor

and medium sub-contractors. However, in fact, the economic situation may upturn or downturn, so the Company prepares to correspond to any events. To make the Company's reputation harmless, the strategy to this risk is to revise the lump-sum payment to the sub-contractors to be relevant to the market rate. The sub-contractors are also ranked so that the Company may hire certain skillful sub-contractors at a special engagement rate. Importantly, TPOLY relies on the pre-fabrication system more in the structure work, floor, roof, and plaster work in order to reduce the reliance on labors. This is a method of solving the lack of labor, but, in practice, the Company has gradually increased the number of sub-contractors and skillful labors to lessen this impact.

3.2.5 Risk in land acquisition for project development. Most projects of TPOLY are located in communities where the clients could enter or exit conveniently. Such land is demanded by other property developers for their projects, but these plots of land are limited. To prevent this risk, the Company has a long-term plan in purchasing some plots of land for future construction projects. The Company has regularly conducted the marketing research, and analyzed the areas likely to be the business centers and communities.

3.3 Holding Company Business by making investments in companies that have operated the generation and sales of electricity from renewable energy. This business is operated by TPC Power Holding Public Company Limited.

3.3.1 Risk in business operation. As TPCCH is a holding company; its core income is the dividends to be paid by its subsidiaries and jointly controlled entities, which are up to the operating results they would achieve. Up to now, TPCCH has made investments in 11 companies. It also aims at making more investments in the business of electricity generation and sales from renewable energy, so it is likely that this subsidiary may have more subsidiaries in the future. However, investments in each project, either present or future, contains some risks, which may adversely affect the business of electricity generation and sales from renewable energy as operated by the Group of Companies as described below.

1) Risk from dependence on service operators for power plant operation. As TPCCH was established by TPOLY at the end of 2013 with an objective of receiving the transfer of investments from TPOLY made in the subsidiaries operating the biomass power plants, which included CRB, TSG and BBRP. At that time, TPCCH has not yet had the staffs with experience and expertise in the operation of biomass power plants. But, now, TPCCH has

engaged VSS to operate CRB and TSG. GPP has been also engaged to operate MWE in accordance with the operation and maintenance agreement because GPP contains many personnel with long investment experience in biomass power plants. Its staffs are specialized in operating the biomass power plants, and controlling and maintaining all machinery and equipment used for generating the biomass-fuelled electricity. GPP has also had some experience in managing the power plants and fuels, which is an important factor in generating and selling the electricity of biomass power plants. The management of power plants by inexperienced or non-specialized people may lead to damages, which could adversely affect revenues and operating performance of TPCH.

However, TPCH recognizes the risk of such dependence. It adheres to the Code of Best Practices defined by imposing the terms and conditions in the Operation and Maintenance Agreement appropriately whereas they can motivate such service operators so that both parties could gain satisfactory benefits. For example, the compensation to a power plant operator in accordance with the Operation and Maintenance Agreement shall be flexible by net income of electricity cost. A minimum electricity generation is fixed, but if the power plant operator can generate the electricity higher than the target, CRB, TSG and MWE shall make an additional payment to such operator as an operating incentive. Meanwhile, CRB, TSG and MWE can gain higher income and profit from some increasing production units. However, if the power plant operator generates the electricity below the target, it would be fined. This is to prevent or reduce the loss of benefits in CRB, TSG and MWE. TPCH also has a process of monitoring the power plant operators' work performance under appropriate conditions. Nevertheless, to prevent a risk that both parties may not agree on certain provisions in the agreement, TPCH plans to recruit some experienced and specialized personnel or train the staffs when the agreement made with the power plant operators has not yet expired so that these staff can replace the said operators.

At present, TPCH does not focus on a single power plant operation model, but considers the appropriateness of each project that it should be operated by TPCH or by a power plant operator. Besides, to lessen the dependence on those operators, TPCH has engaged some engineers with good experience and expertise in operating the machinery in biomass power plants to run the biomass power plant of MGP. The biomass power plant of MPG has started its commercial operation on April 8, 2016. As the subsidiary of TPCH has begun the power plant operation; this can be compared with the performance of those

operators, and makes TPCH more confident that it will be able to operate the biomass power plants in the future, and gradually reduce the dependence on those external operators.

2) Fuel risk

2.1) Risk from adequacy of fuel. Fuel is one of the most important factors for the operation of biomass power plants, especially those that owns no fuel sources. If a biomass power plant fails to find out the fuel sources sufficiently and consistently, it will not be able to generate electricity by its full production capacity. This could directly impact the project revenues and returns, ability in repayments, and dividend payments to the Company eventually.

TPCH recognizes this impact, and formulates a guideline to mitigate such risk. To elaborate, before an investment and development of a biomass power plant, TPCH shall study the adequacy of fuel by surveying any fuel sources around the power plant whether the fuels could be delivered or not. TPCH determines that each biomass power plant of its subsidiary must have a big fuel warehouse and an open area to store many fuels to be used during the fuel shortage. TPCH has a policy of storing some fuels in the warehouse at least 15 days. This measure is specified in the Operation and Maintenance Agreement made with VSPP for CRB and TSG power plants, and with GPP for MWE power plant.

TPCH also defines the strategy for approaching fuel sources by employing the power plant operators whose scope of service includes the sufficient supply of fuels for the power plant operation. TPCH will consider the power plant operators capable of approaching fuel sources, and of generating and selling electricity as specified in the Operation and Maintenance Agreement such as power plant projects of CRB, TSG and MWE. TPCH may advise its subsidiary to make a long-term fuel purchase agreement with an entrepreneur who owns the fuel. In this regard, TPCH has made investments in power plant projects with fuel owners, e.g. power plant projects of MGP, PGP, SGP, and PTG in order to approach big fuel sources to feed those power plants consistently. Besides, TPCH has a policy of building the good relationship with other fuel owners to ensure that the fuels would be supplied to the power plants adequately in the long term.

2.2) Risk from the fluctuation of fuel prices. Fuel cost is the highest portion of cost in a biomass power plant. If the fuel price becomes high significantly, the profit and

returns of such biomass power plant would be affected substantially as well. TPOCH manages the risk of fuel price by assigning each power plant operator to be responsible for fuel supplies as specified in the Operation and Maintenance Agreement. However, according the previous operation data, the fuel price has not been so fluctuating that it takes effect to TPOCH. In addition, the different cost is partly derived from the combination of fuel types used in the electricity production as a cost management. For example, stump is cheaper than wood slab. If stump is much more used, the average cost is likely to be lower.

TPCH has a policy of monitoring fuel prices regularly. Whenever the core fuel comes out so much and the price drops, TPOCH shall inform the power plant operators to purchase more fuel because the power plants of TPOCH have some large areas, either indoor or outdoor, for fuel storage. In case that the price of such core fuel is so high that it is not worthwhile for electricity production, TPOCH would consider other types of fuel applicable and harmless to the incinerator of those power plants because TPOCH selects the machinery technology compatible with several types of fuel.

3) Risk from delayed power plant projects. Currently, some power plant projects of TPOCH have been under construction. This is a risk that the project implementation may not be in line with the plan. TPOCH recognizes the risk of project development before each biomass power plant will begin its commercial operation. These projects may be delayed by procedures of applying for licenses, construction and installation of machinery and equipment by the EPC contractor, conflicts with surrounding communities, or natural disaster. These factors may affect the operation period and/or cause the cost overrun, which make TPOCH unable to recognize the revenues as planned, and the investment returns miss the expectation. Therefore, TPOCH defines some operating measures to reduce this risk; for example, preparation of a manual describing the procedures of submitting applications for all and any necessary licenses as well as all important documents and information to be submitted at each stage to ensure accuracy, completion, and quickness in applying for licenses, selection of sub-contractors in good reputation, experience, and expertise, making the agreements carefully, work guarantee after completion of each construction project, request for contractors to guarantee the efficiency and proficiency of electricity generation, communications with surrounding communities for the good relationship with them, making the insurance to mitigate the impact from natural disaster. TPOCH will engage an external expert to manage the project and construction work

to ensure that the construction work would be completed on schedule. If the construction work could not be completed as stated in the construction service contract, the said contractor would be fined.

4) Risk from not receiving investment returns as anticipated from subsidiaries. TPOCH prioritizes this risk; it assigns the Business Development Department to be in charge of regularly monitoring the operating results of each power plant invested by TPOCH. For example, VSPP, the biomass power plant operator of CRB, would summarize the operating performance of CRB biomass power plant on a daily basis, and analyze the actual returns as compared with the projection, to ensure that the businesses invested by TPOCH achieve the operating results and efficiency as anticipated. In addition, the Company has appointed representatives of the Company. He is also a senior executive in the subsidiary company.

- Determine the policy on management of the Company by the related organizations and / or the management of the Company to hold the position in the subsidiary company, which is not less than the shareholding of the associated company (as the case may be). He has also been appointed as Senior Executive Officer in the subsidiary.
- The Company can access the information of the operation of the power plant at all times with the Real Time Monitoring system and the Company will receive a daily report from the operator of the power plant. As a result, the business development department can prepare a report analyzing the operating results of the subsidiaries to the management and the Board of Directors. usually To make correct and timely adjustments.
- Check the accuracy of the information in the audit plan and verify the accuracy of the annual report (audit plan) to ensure that the company has an internal control system. To the Audit Committee

5) Risk from dependence on major clients. For all current power plants of TPOCH, they have only one major client that is PEA (for the project, PTG, the client is EGAT), which is a state enterprise accepting the entire amount of electricity generated in accordance with the Power Purchase Agreement, which specifies the amount or purchase quantity and

price precisely at each period, based on the policy of supporting the electricity production and use from renewable energy by the Energy Policy and Planning Office, Ministry of Energy like other power producers from renewable energy sources.

6) Risk from accidents, protest of local people, and sabotage. For the business operation by the Group of Companies, any accidents may occur from machines or equipment, which may cause fire. There is also a risk from the community protest due to the negative attitude toward the power plant or production process possibly impacting those communities. The accidents may derive from the useful life of the power plant, personnel's operation. The power plants are also the target of sabotage.

TPCH believes that, from the existing measures and close monitoring of the said situations, this risk hardly occurs. However, the management of TPCH set up several measures to be implemented constantly to prevent and reduce such risk as follow;

- Emphasis on the worker. (Or the management of the power plant) regularly to avoid negligence, because it is believed that negligence may cause negligible damage.
- Maintenance of machinery and equipment for a specified period of time so that the machinery or equipment can operate efficiently.
- Building good relationships with communities around the power plant and coordinating with government agencies. And the local government involved. To achieve the correct understanding of all parties.
- Defining security plans and emergency plans. Installation of equipment such as CCTV system. Including regular drills.
- Comprehensive coverage of All Risks, Machinery Breakdowns, Business Interruption and Third Party Liability to ensure that any unexpected events are adequately protected.

7) Risk from changes in policy by the government and regulatory agencies.

Risk from the electricity purchase by means of competitive bidding. As the Energy Regulatory Commission (ERC) issued a regulation on purchase of power from very small power producers (VSPP) projects using renewable energy (excluding solar power projects) under the FiT scheme via competitive bidding, the projects proposing the maximum discount of FiT_F would be first selected, and sorted out according to the proposed discount

until the ERC receives all electricity quantity as intended. This regulation drives the competition tougher; this may adversely affect the goal of TPCH in expanding its investments in power plants in the future.

However, previously, TPCH has made most investments in the southern region. To reduce the aforesaid risk, TPCH plans to expand investments in other regions and on abroad. It also considers other types of renewable energy, e.g. solar, wind, waste, etc.

Risk from foreign investments. TPCH plans to expand investments in the electricity generation business in Thailand and on abroad constantly. At present, TPCH conducts a feasibility study on the development of an electric power dam project in the Lao People's Democratic Republic. However, TPCH realizes the risk of new project development in other countries; therefore, it places certain measures on selecting investment projects and investors carefully. All related factors are analyzed, including economic policy, politics, and society of countries to be invested. Then, the economic and industrial situations, financial cost, cost of machinery and equipment, and cost of construction as well as all related laws would be analyzed carefully in order to have the investment probability and expected returns. The sensitivity analysis is also conducted to have the risk prevention guideline as this takes the great and direct effect to the business operation on abroad.

8) Risk associated with compliance with environmental law. The operation of electricity production and sales by subsidiaries of TPCH is under laws and regulations on environmental impact prevention and mitigation as prescribed by either central government entities or local authorities. These laws and regulations cover the soil, water, air, and toxin pollution control, disposal and management of refuse and waste, health and safety at workplace, and management of hazardous materials. The said requirements are complicated and amended frequently, but the enforcement, in some cases, depends on the interpretation by those related authorities.

The Group of Companies recognizes the environmental impact caused by power plants. Therefore, before starting a power plant construction, TPCH always prepares the Environmental and Safety Assessment ("ESA") and arranges the public participation for local people around the subsidiary's power plant, except PTG project for which TPCH has engaged a consultant to conduct the study and prepare the Environmental Impact Assessment ("EIA") as this project contains the production capacity over 10 Megawatts. The preventive environmental impact measures carried out by the Group of Companies include the

substance release system, pollutant control system, waste water treatment system, waste and disposal treatment system by distributing some fuel ash left from fuel combustion to local people and surrounding communities to be utilized as fertilizer, multi-cyclone dust collector system, and electrostatic precipitator, etc. TPOCH and its subsidiaries also monitor and examine any possible environmental impact closely to ensure that the electricity generation process of these subsidiaries is in conformity with any and all related laws and regulations, and to minimize the environmental pollution so that their power plants are actually the power plants for local communities. Subject to the noise, dust, and air pollution examinations in all power plants of these subsidiaries in 2018, all examination results are relevant to the criteria prescribed by law.

9) Financial risk

Risk from fluctuation of interest rates. The operation of biomass power plant needs high investment. Most power plant operators prefer the long-term project finance granted by financial institutions. Debt to equity ratio would be approximately 2:1 or 3:1. The interest charged is usually the floating interest rate. The power plants of these subsidiaries inevitably rely on such loans. Therefore, changes in interest rate take the direct effect to the financial expenses of TPOCH.

TPCH exactly recognizes this risk. Therefore, during a project feasibility study, TPOCH studies the impact from changes in interest rate in case of high fluctuation of interest rate. This is to assess the financial impact before making investments in each power plant. Besides, when listed on the SET, TPOCH may consider other alternatives from various financial sources such as debt instrument with fixed interest rate to mitigate the fluctuation of interest rate.

10) Risk affecting the shareholders' rights or investment

Risk associated with management in subsidiaries in which TPOCH holds shares less than 50 percent and at 75 percent. As TPOCH is a holding company and owns no core business whereas its core revenues are dividends paid by its subsidiaries. A resolution for dividend payment by each subsidiary requires the majority of votes by the meeting of shareholders. Further, entering into any significant transactions including capital increase, capital reduction, and business acquisition or disposal requires not less three-fourths of votes from the meeting of shareholders. Therefore, TPOCH has the risk of not being able to control the votes to pass such significant resolution in its subsidiaries. As of 31 December 2018, the

subsidiaries in which TPCH held at or less than 50 percent of shares were MGP, SP, and PA, and those in which TPCH held less than 75 percent of shares were CRB, TSG, PTG, PGP and SGP, and TPCH held at or more than 85 percent of shares were MWE, TPCH1, TPCH2 and TPCH5.

From the proportion of shareholding in those subsidiaries, the proportion of directors is not less than the proportion of shares held in each. TPCH may exercise the right as the major shareholder to control the majority of votes in every subsidiary, so it would be able to control the resolution regarding dividend payment, except in the case of MGP in which TPCH held only 46 percent of shares. However, in respect with management in each subsidiary, the company regulations prescribe that every subsidiary must conform to the policy placed by TPCH.

4. Assets Used in Operation

4.1 Core Permanent Assets for Business Operation

4.1.1 Construction Business

The core permanent assets used by TPOLY in the construction business had the book value (less depreciation) as of 31 December 2018 as follows:

Unit: Million Baht

Asset Features	Location	Ownership	Obligation	Net Value As of 31 Dec 18
Land and improvements for 3 plots of land Title Deed No. 5968, 6541, and 6542 in an aggregate area of 1 Rai 35 square wah	2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road, Chorakhehua, Ladprao, Bangkok	Owner	Mortgaged to financial institutions	6.86
Office building and expansion	2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road, Chorakhehua, Ladprao, Bangkok	Owner	Mortgaged to financial institutions	21.65
Land and improvements for 2 plots of land Title Deed No. 14440, and 14441 in an aggregate area of 18 Rai	Amphoe Sam Khok, Pathum Thani	Owner	Mortgaged to financial institutions	9.00

Asset Features	Location	Ownership	Obligation	Net Value As of 31 Dec 18
Building expansion and dwelling houses	Amphoe Sam Khok, Pathum Thani	Owner	-	10.47
3 plots of land Title Deed No. 3921, 3922, 19049 and 76130	Surat Thani	Owner	-	11.00
Tools, machinery and construction equipment		Owner	Free of obligation/ under hire purchase agreement	20.69
Office supplies and furniture and fixture		Owner	Free of obligation	6.40
Vehicles		Owner	Free of obligation/ under hire purchase agreement	4.37
Electrical and Water Distribution system	2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road, Chorakhehua, Ladprao, Bangkok	Owner	-	1.07
Total				91.54

4.1.2 Property Business

The core permanent assets used by TPOLY in the construction business had the book value (less depreciation) as of 31 December 2018 as follows:

Unit: Million Baht

Asset Features	Location	Ownership	Obligation	Net Value As of 31 Dec 18
Office supplies and furniture and fixture		Owner	Free of obligation	0.11
Vehicles		Owner	Free of obligation	0.06
Total				0.17

4.1.3 Energy Business

At present, the power plant projects have the core equipment as summarized below.

Equipment	Technologies/ Producer	Type	Functions
CRB/ MWE/ TSG/ PGP/ SGP			
Combustion Chamber	Germany/ Germany	Combustion chamber in the type of step grate stoker with post combustion chamber	Fuel is fed to the staging combustion chamber by hydraulic driven device where the movement rapidity can be adjusted. When fuel is driven from each stage, it will be turned up so some fuel pieces placed on the grate surface and not be burned yet will be turned and burned to have a complete combustion. Post combustion makes any incomplete combustion perfect in this combustion chamber. It greatly improves the combustion efficiency.
Boiler	Germany/ Thailand	Water tube boiler with 1 set of drum. Water tubes are the walls transferring heat, and natural water circulation	Heat from the combustion chamber is fed to the boiler to boil water, which is changed to be the superheated steam that will be released via water tube to spin the steam turbine.
Steam Turbine	Japan/ Japan	Impulse stream turbine with 9 sets of impeller, entire condensate and worm gear	Superheated steam from the boiler is released to spin the steam turbine. Steam is condensed to be the condenser by cool water from the water tank and cooling tower. This water, then, is sent back to the boiler for re-boiling.
Generator	Japan/ Japan	Closed synchronous generator with air cooled water chiller and water cooled heat exchanger. Rotating magnetic field	The generator is driven by steam turbine through the worm gear, and it generates electric current about 6,600 volts to be fed to the electric transformer to turn the electric current to be 33,000 volts for CRB and

Equipment	Technologies/ Producer	Type	Functions
		generation and brushless type.	TSG. For MWE, the electric transformer will transform the electric current to be 20,000 volts to be further sold to PEA. About 10 percent of generated electricity is used for some equipment used for electricity generation, e.g. fan, water pump, etc.
MGP			
Combustion Chamber	Denmark/ China	Combustion chamber in the type of vibration grate stoker with water cooling	Fuel is fed to the combustion chamber by hydraulic driven device where the inclined and vibration grate is installed. The combustion duration will be set appropriately for each type of fuel. The vibrator is timed to function periodically. Burned fuel on the top of the grate will flow through the bottom of the grate before dropping into the bottom ash carrier. Heat from combustion will be transferred to the boiler to produce some steam.
Boiler	Demark/ China	Water tube boiler with 1 set of drum. Water tubes are the walls transferring heat, and natural water circulation. There are 4 sets of superheated steam boiler, which is the technology of producing high-temperature water and high pressure.	Heat from the combustion chamber at the bottom of the boiler will deliver heat by heat convection and radiation to boil the water until it becomes the superheated steam. This steam will be sent via water tube to spin the steam turbine.
Steam Turbine	China/ China	Reaction steam turbine with 18 sets of impeller, entire condensate and worm gear	Superheated steam from the boiler is released to spin the steam turbine. Steam is condensed to be the condenser by cool water from the water tank and cooling tower. This water, then, is sent back to the boiler for re-

Equipment	Technologies/ Producer	Type	Functions
			boiling.
Generator	Germany/ Germany	Closed synchronous generator with air cooled water chiller and water cooled heat exchanger. Rotating magnetic field generation and brushless type.	The generator is driven by steam turbine through the worm gear, and it generates electric current about 11,000 volts to be fed to the electric transformer to turn the electric current to be 22,000 volts to be further sold to PEA. About 10 percent of generated electricity is used for some equipment used for electricity generation, e.g. fan, water pump, etc.

4.2 Investment Policy and Management in Subsidiaries and Joint Ventures

Investment policy of TPOLY is to make investments in any businesses supporting and benefiting the business operation of TPOLY or they are in industries likely to be prosperous. Returns from such investments shall be mainly regarded.

4.2.1 Construction Business and Joint Ventures. TPOLY makes investments with other companies with experience and specific expertise to jointly tender bids, and carry out various construction projects. They must have credentials and technical specialty as each client requires. Except some returns from project operation, TPOLY also obtains those specific techniques as well as working experience. This profile is useful for further bidding.

4.2.2 Property Business. TPOLY is specialized in the construction work and it catches sight of an opportunity in the property business. Therefore, TPOLY makes investments in the property business as another channel of earnings.

4.2.3 Energy Business. From an experience in the construction of power plants and the feasibility study on energy business, the business growth is likely to be high as electricity is so essential. Therefore, TPOLY decides to operate the energy business to boost some secure revenues in the long term.

4.2.4 Trading Business. This business helps support other businesses, e.g. procurement and sales of construction equipment to the construction business and property business, procurement and sales of fuel to the energy business, etc. The ordered products may be sold to other construction companies and trading partners.

In respect with the management, TPOLY places a control measure by delegating its representatives to be directors in every subsidiary and joint venture. But, TPOLY will not take a strict control on its associated companies; it only delegates its representatives to be directors there. The number of representatives delegated by TPOLY to be directors shall be up to the proportion of shares held by TPOLY.

5. Legal Disputes

On January 15, 2009, TPOLY submitted a dispute to Thailand Arbitration Center in Black Case No. 2/2552 to claim against a client for the construction service fee and damage cost amounting to Baht 20,910,357.18. But, the said client filed the statement of defense/counterclaim by claiming TPOLY to pay the damage amounting to Baht

212,215,137.90. On July 26, 2013, the arbitrator had the arbitral award that TPOLY had to pay damage to the client in the amount of Baht 45,421,859.84 with interest rate of 7.5% per annum of such claim amount from the date of filing the statement of defense/counterclaim up to the date of full payment, which was Red Case No. 60/2556 dated November 11, 2013.

TPOLY entered a charge against a client in Black Case No. Por. 293/2556, Red Case No. 1138/2557 The Court of First Instance gave judgment that such client paid the amount of Baht 58,702,466.58 to TPOLY with interest rate of 7.5% per annum of such principal from the date of entering the charge, and that the client had to return the advance payment bond, and dismiss the counterclaim. However, this client lodged the appeal, but the Appeal Court confirmed the judgment of the Court of First Instance. Thus, the client appealed to the Supreme Court, and requested for the stay of execution on May 25, 2018. At present, this case has been in the course of the trial by the Supreme Court.

6. Other General and Significant Information

6.1 General information

Company Name : **Thai Polycons Public Company Limited**

Nature of Business : **Construction business** – TPOLY provides general construction services, including design, procurement, and service for an integrated installation of engineering system. The construction services are provided to both private and government sectors whereas TPOLY may act as a main contractor or sub-contractor. The projects performed as the main contractor or sub-contractor may be acquired via bidding or negotiation or cooperation with other companies as joint ventures.

Property development business – TPC Asset Company Limited (“TPCA”) was incorporated on May 25, 2011. Its current registered capital is Baht 230 million in which Thai Polycons Public Company Limited holds 99.99 percent of its registered capital. TPCA operates the business of land and houses for sales. TPCA is the project developer and project owner for various developed houses. Now, the active

projects are Greenwich Town Home Ramintra comprising 174 units of 3-storey modern town homes, and Greenwich Prime Hathairat comprising 94 units of 2-storey single detached houses.

Biomass energy business – TPC Power Holding Public Company Limited (“TPCH”) was incorporated on December 26, 2012 and it was converted into a public limited company on June 19, 2014 before being listed on the Stock of Thailand on January 8, 2015. TPOLY holds 41.26 percent of registered shares in TPCH that is a holding company investing in companies whose business is to generate and sell electricity from renewable energy, and to support its subsidiaries’ operations. TPC Power Holding Public Company Limited has spent investments in its subsidiaries and jointly controlled entities. At present, TPCH plans to operate the electricity generation and sales in 11 biomass power plants. Its main income is the dividends paid by these companies and other newly established companies.

Trading business – TPC Bangkok Supply Company Limited (“TPCB”) was incorporated on January 16, 2013. Its current registered capital is Baht 25 million and TPOLY holds 99.99 percent of shares in it. TPCB operates the business of purchasing, selling, importing, and exporting all types of local and foreign product. TPCB conducts project feasibility studies, and procures product sources. The targeted products are the products for construction work, biomass power plants, and other products to boost more revenues for TPCB.

Head Office : 2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road,
Chorakhehua, Ladprao, Bangkok

Branch Offices : 140, Kampung Baru Road, Tambon Bang Nak, Amphoe
Muang Narathiwat, Narathiwat

: 106 Moo 10, Na Kuea, Tambon Bana, Amphoe Muang
Pattani, Pattani
: 74 Moo 5, Tambon Ja Nong, Amphoe Chana, Songkhla
Registration : 0107551000037
Number
Telephone : 0-2942-6491-6, 0-2943-2930-8
Facsimile : 0-2943-2939
Website : www.thaipolycons.co.th
E-mail Address : info@thaipolycons.co.th
Amount and type of total issued shares:

- As of February 3, 2017, the registered capital of TPOLY is Baht 692,868,493.
- Paid-up capital is Baht 566,892,947, divided into 566,892,947 ordinary shares with a par value of Baht 1.00 per share

6.2 General Information about Juristic Persons in which TPOLY Holds Shares over 10 percent

Company Name : **TPC Asset Company Limited (“TPCA”)**
Nature of Business : Property development
Head Office : 2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road,
Chorakhehua, Ladprao, Bangkok
Registration : 0105554068498
Number
Telephone : 0-2942-6491-6
Facsimile : 0-2942-6497
Website : www.tpcasset.co.th
E-mail Address : info@tpcasset.co.th
Amount and type of total issued shares:

- As of December 31, 2016, the registered capital of TPCA is Baht 230,000,000.
- Paid-up capital is Baht 230,000,000, divided into 2,300,000 ordinary shares with a par value of Baht 100.00 per share

Shareholding : 99.9996 percent

Company Name : **TPC Power Holding Public Company Limited (“TPCH”)**

Nature of Business : Biomass energy

Head Office : 2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road,
Chorakhehua, Ladprao, Bangkok

Registration : 0107557000233

Number

Telephone : 0-2943-2935-6

Facsimile : 0-2943-2935-6 ext. 444

Website : www.tpcpower.co.th

E-mail Address : info@tpcpower.co.th

Amount and type of total issued shares:

- As of December 31, 2016, the registered capital of TPCH is
Baht 401,200,000.

- Paid-up capital is Baht 401,200,000, divided into
401,200,000 ordinary shares with a par value of Baht 1.00
per share

Shareholding : 41.26 percent

Company Name : **TPC Bangkok Supply Company Limited (“TPCB”)**

Nature of Business : Trading

Head Office : 2, 4 Soi Prasert-Manukitch 29, Yak 8, Prasert-Manukitch Road,
Chorakhehua, Ladprao, Bangkok

Registration : 0105556008981

Number

Telephone : 0-2942-6491-6

Facsimile : 0-2942-6497

Amount and type of total issued shares:

- As of December 31, 2016, the registered capital of TPCB is
Baht 25,000,000, comprising 2,500,000 ordinary shares with a
par value of Baht 10.00 per share

- Paid-up capital is Baht 25,000,000, divided into 2,500,000 ordinary shares with a par value of Baht 10.00 per share

Shareholding : 99.9990 percent

6.3 General Information about Other References

Securities Registrar

Registrar : Thailand Securities Depository Company Limited (“TSD”)
Address : 93 Stock Exchange of Thailand Building, Ratchadaphisek Road, Khwaeng Dindaeng, Khet Dindaeng, Bangkok 10400
Telephone : 0-2009-9388
Facsimile : 0-2009-9476
Website : <http://www.tsd.co.th>

Auditor

Company : D I A International Audit Company Limited
Address : 316/22, Soi Sukhumvit 22, Sukhumvit Road, Khwaeng Khlong Toei, Khet Khlong Toei, Bangkok 10110
Telephone : 0-2259-5300
Facsimile : 0-2260-1553