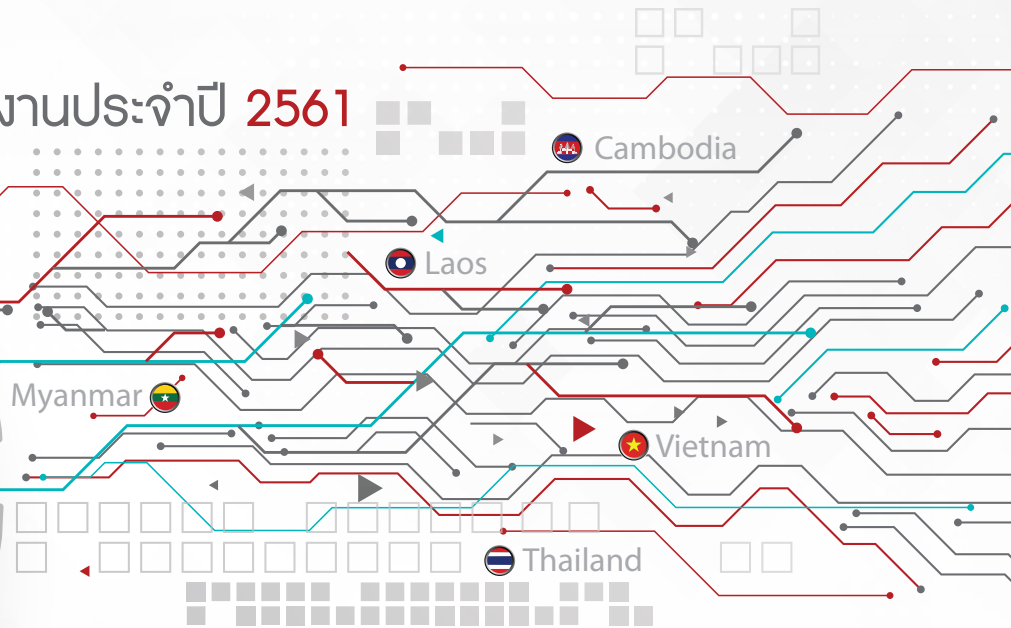




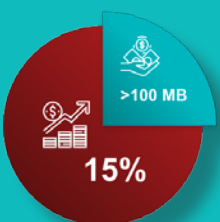
TRC CONSTRUCTION PLC  
บริษัท ทีอาร์ซี คอนสตรัคชั่น จำกัด (มหาชน)



รายงานประจำปี 2561



# ANNUAL REPORT 2018



## Vision

“A Pioneer Organization who delivers innovative project solution in the region” (CLMVT)

## Mission

1. To our shareholders and partners  
We will deliver sustainable returns through good governance
2. To our customer  
We will deliver excellent service with high quality, environmental and safety awareness to ensure our clients' success.
3. To our society  
We will conduct business with good corporate responsibility.
4. To our employees  
We will create best working environment and become the best operational – excellence organization.

## 3-Year Aspiration (2019 - 2021)

1. Top 10 in total revenue in construction service industry
2. Top 5 in percent net profit margin in construction service industry (percent of revenue)
3. Dividends from investment >100 MB with threshold >15%

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## Message from the Chairman of the Board of Directors

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**Mrs. Paichit Rattananon**

Chairman of the Board of Directors

In 2018, Thailand's domestic construction industry was growing from last year. An aggregate of construction service revenues for the year as posted by SET publicly listed companies under the Construction Services sector has been reported at Baht 180,611 million, rising from the year 2017 by Baht 2,402 million or 1.35%. With respect to the milieu of pipeline system construction segment, the competition was getting high, especially following the decision of PTT Public Company Limited – the country's leading player in the natural gas exploration and production industry – to reduce its investment earmarked for the year 2018 from Baht 246,613 million to Baht 221,294 million whereby the investment reduction was mostly in oil and natural gas transmission pipeline business. In addition, the fact that the Company's competitors, ranging from offshore conglomerates to Thai-national construction firms of mid- and large-size, seemed to have been relentless to sign up as many newly-launched projects as they could to build up their backlog has compounded the intensity of rivalry among all players in the construction industry. As its effort to explore new horizons of opportunity, the Company set out to increasingly participate in tenders for works beyond the familiar territories, introduce some changes to its operating strategy, and invest more in the development of blue-ocean, innovative projects as replacement of the declining backlog of pipeline works e.g. the construction of automated warehouses, underground electrical conduits, etc. In 2018, the Company has also seen a growth in revenues from the construction of industrial plants and civil works as a result of the government's ongoing investment in infrastructure megaprojects and further investment planning for medium- and small-size projects being funded by government's annual public budget which effectively help reinvigorate private sector's investment in construction.

Speaking of the outlook of Thailand construction industry in 2019, the growth is expected to continue from the prior year owing to the proliferation of construction-related projects including megaprojects of infrastructure in Bangkok and vicinities, not least in the provincial area and the Eastern Economic Corridor (EEC) zone. Several more projects are also anticipated to roll out and open up for tenders e.g. Map Ta Phut Industrial Port Development Project, Phase 3; the Western Extension of MRT Orange Line (Thailand Cultural Center – Bang Khun Nont), etc. Furthermore, there have been the private sector's petrochemical projects that were already launched for bidding and is currently in the initial phase of construction e.g. the Baht 4,825 million Clean Fuel Project (CFP) owned by Thai Oil PLC, a series of projects by IRPC PLC, etc. According to the report provided by SCB Economic Intelligence Center (IEC), it is projected that the combined revenues to be generated by builders and contractors from projects owned by both private enterprises and state bodies would grow at 8% annually during 2019 – 2020, contributing to increasing demand of labor/employment and rising wage rates. With its revised operation strategy and corporate profile in terms of experience, capability in engineering, technology and human resources, the Company



is confident that TRC Group is fully capable of taking in projects of even more diverse nature and effectively managing the work required to complete all projects on hand.

In response to changing business landscape, the Board of Directors meeting held in November 2018 has resolved to approve, first, the proposed corporate vision – “A pioneer organization who delivers innovative project solution in the region (CLMVT)” – , second, the revision of corporate value and, third, the 3-year (2019 – 2021) aspiration; that is, being listed in the top 10 in total revenue in construction service industry and the top 5 in percent net profit margin in construction service industry (percent of revenue), and from investments more than Baht 100 million with threshold more than 15%.

With respect to the operating results of the Company and its subsidiaries for the year 2018, an aggregate of revenues decreases 5.39% from the previous year to Baht 2,305 million and the loss attributable to the Company’s equity holders is posted at Baht 2,041 million (equivalent to -88.55% in net loss margin) while the prior year was Baht 93 million in profit attributable to equity holders (or, 3.81% in net profit margin). The main reason for the net loss in 2018 is the unsettling situation with the development of mining project of the Company’s associate ASEAN Potash Chaiyaphum PLC which led to the Company’s decision to create provision accounts for debts and expenses incurred to the Company in connection with the potash mining project; that is, a bad debt account, an allowance for doubtful debts, an impairment loss on investment, and a share of loss from investments in the associate, whereas the fallout on the Company’s financial statements amounts to Baht 2,093.76 million. In absence of these newly-created accounts, the net profit of the Company and its subsidiaries would have been Baht 53.19 million, equivalent to 2.31 percent in net profit margin.

In doing business, the Company has always recognized the importance of embodying and maintaining corporate culture, and ensuring that executives and officers in all levels comply with corporate governance code and code of conduct. According to the results of the 2018 Corporate Governance of Thai Listed Companies Survey conducted by Thai Institute of Directors Association, the Company has achieved, 2 years in a row, a CG score of “Excellent” level of recognition. The Company has also recognized the importance of the Company’s engagement in social activities that will bring good to the society, community, and the environment through CSR programs focusing particularly on youth educational development and learning, public interest donation, and environmental protection campaigns. In 2018 CSR activities organized by the Company include hosting the event of National Children’s Day at a school nearby the headquarters, Back to Hometown program, donations to several foundations, Go Green project championing garbage sorting to reduce waste by all employees, etc.

On behalf of the Company’s Board of Directors, I would like to express my sincere gratitude to all shareholders, customers, vendors, financial institutions, the public and private sectors, business partners and the Company’s management and employees for the continued support and trust in our organization. The Company is firmly determined to evolve and strengthen business position to ensure continual growth, stability, and sustainability while still adhering to the good corporate governance code the best interests of shareholders, stakeholders and the nation



(Mrs. Paichit Rattananon)

Chairman of the Board of Directors

15 March 2019

# 2018 Report of the Audit Committee

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The Audit Committee of TRC Construction Public Company Limited consists of 3 Independent Directors namely Assoc. Prof. Aekkachai Nittayagasetwat, Ph.D., FRM. as Chairman, Mr. Arun Chirachavala and Mrs. Puangthip Silpasart as members whose qualifications meet the Stock Exchange of Thailand's requirements and having experience in engineering, finance and banking, accounting and energy business.

In 2018, the Audit Committee held a total of 4 meetings and in 2019 up to the date of this report, the Audit Committee already had once. In each and every meeting, all Audit Committee members as well as the Company's management and the appointed internal auditor were present. In addition, the Company's appointed external auditors for the years 2017 and 2018 have also attended in the respective Audit Committee meetings held in February 2018 and February 2019 to present the audit findings as well as the auditor commentary wherein the auditor was given an opportunity to privately discuss with the Audit Committee members without the presence of management to allow for unreserved expression of auditor's aspect. The Audit Committee performed its duties as briefly described below.

**Review of Financial Statements and Reports:** The Audit Committee reviewed the 1<sup>st</sup> to 3<sup>rd</sup> quarter as well as annual financial statements for the year 2018 of the Company and its subsidiaries, with the information in the notes to the financial statements to ensure the adequacy and completeness of disclosure and examined key audit matters being addressed in the Auditor's Report. The relevant management officers were also invited to join the Audit Committee meetings to present the agenda in relation to financial statements, to report the analysis and operating results of the Company and its subsidiaries, and to answer the Audit Committee's inquiries. After the review, the Audit Committee is of the opinion that financial statements of the Company and its subsidiaries moderately present, in all material respects, the information as required by financial reporting standards, are reliable and beneficial to users of the Company's financial statements.

In the meeting between the 2018 Independent Auditor and the Audit Committee, the information communicated to the Audit Committee by the auditor include the audit findings and summarized key matters as elaborated in the Auditor's Report e.g. Emphasis of Matters that have been discussed in 2 separate sub-sections – first, the set up of provision accounts in respect of the Company's investment and construction services provided to its associate and, second, the classification of debentures as current liabilities due to the Company's inability to maintain certain financial ratios as specified in the conditions – Key Audit Matters (KAMs), etc. Other matters which the auditor has presented to the Audit Committee include a summary of notes to the financial statements, the latest version of financial reporting standards, and auditor's opinion in connection with accounting and tax.

**Review of Compliance with Laws:** The Audit Committee reviewed the Company's compliance with the law on securities and stock exchange, the regulations of the Stock Exchange of Thailand, and other laws governing business operation of the Company and its subsidiaries. After review, no transaction of either the Company or its subsidiaries was found in breach of law or relevant regulations.

**Review of Internal Control Evaluation:** The Audit Committee reviewed the internal controls of the Company and its subsidiaries by consulting the 1<sup>st</sup> to 4<sup>th</sup> quarter reports on internal audit performance for the year 2018. After review, no significant pitfall or weakness was found; there has been a proper system of property maintenance and the Company's management has been attentive to the identified deficiencies and taken prompt actions to correct them as the internal auditor advised. In every Board of Directors meeting held to consider financial statements, the Audit Committee would present the minutes of Audit Committee meeting and the internal audit


findings to the Board and raise to the Board's attention any material audit issues to which the Audit Committee would like to seek the Board's advice for proper course of remedial actions and follow-up plan. The Audit Committee has also considered the 2018 program for evaluating internal controls adequacy, as proposed by the internal auditor, before presenting it to the Board meeting. The Audit Committee and the Board have mutually agreed that the internal controls and internal audit system implemented in 2018 by the Company and its subsidiaries are appropriate and adequate.

**Regulation:** The Audit Committee has selected EL Business Advisory Co., Ltd. – an independent internal auditor commissioned by the Company since 2015 – to be internal auditor for 2018 and considered the appropriateness of the 2018 internal audit plan. This auditing company was to report the audit results along with recommendations to the Audit Committee every quarter to ensure that the internal controls of the Company and its subsidiaries are efficient and appropriate for all corporate units.

**Review of Connected Transactions:** The Audit Committee reviewed connected transactions in 2018 – transactions between the Company and ASEAN Potash Chaiyaphum PLC – to see whether they were performed pursuant to the corporate policy on connected transactions and the Notification of the Stock Exchange of Thailand Commission and in a fair and reasonable manner.

**Selection and Nomination of External Auditor, and Audit Fee:** The Audit Committee has selected an independent/external auditor for 2018 on the basis of the prior year's performance, qualifications, skills, knowledge, professional proficiency, experience in auditing and providing recommendations, and the independence in conducting audits. After consideration, the Audit Committee proposed the nomination, or EY Office Limited, to the Board of Directors meeting in order to seek final approval from the 2018 annual general meeting of shareholders. In this meeting, shareholders were requested to consider the proposed appointment of EY Office Limited as independent auditor of the Company and the audit fee set at the rate of Baht 1,050,000 (no change from last year's rate). EY Office Limited has also been appointed as independent auditor for 2018 of four subsidiaries, i.e. Sahakarn Wisavakorn Co., Ltd., TRC Utility Co., Ltd., Hydrotek Sahakarn Joint Venture, and SH Crossing Co., Ltd., as well as ASEAN Potash Chaiyaphum PLC – the Company's associate.

Generally, in 2018, the Audit Committee has completely performed its duties as assigned by the Board of Directors in a prudent, vigilant, and independent manner. The Audit Committee is of the opinion that:- the 2018 financial statements of the Company and its subsidiaries are correct and reliable with the provision for loss established on a prudent basis in conformity to the generally accepted accounting principles; the Company and its subsidiaries have conducted business within the confines of proper and efficient internal controls and internal auditing; the Company and its subsidiaries have been in full compliance with law, rules and regulations, and other regulatory requirements pertinent to business operation.



(Assoc. Prof. Aekkachai Nittayagasetwat, Ph.D., FRM.)

Chairman of the Audit Committee

25 February 2019

# Directors' Responsibility Statement in Relation to the Financial Statements

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The Board of Directors of TRC Construction Public Company Limited is responsible for financial statements of the Company and its subsidiaries, which have been prepared in accordance with financial reporting standards and accounting policies properly drawn up and consistently applied pursuant to financial reporting standards. The Company's management has exercised discretion with due care to develop financial projections and use key assumptions in preparing financial estimates of the Company's subsidiaries for purpose of accounting entry in relation to investments in its subsidiaries. The Board has also ensured that the accounting records and the disclosure of material information in the notes to the financial statements are accurate, complete and indicative of TRC Group's financial position and operating results for the benefit of shareholders and investors.

The Board of Directors has established an Audit Committee with 3 members being appointed from the Company's independent directors and having full qualifications as required by the Stock Exchange of Thailand. The Audit Committee's main duties are to review the Company's accounting records and to ensure, first, that these records are accurate, complete, adequately and timely prepared and, second, that there is a proper internal control system in place to prevent frauds or other similar irregularities. The Audit Committee's opinions in connection with the performance of duties during 2018 are provided in this annual report under section 'Report of the Audit Committee'.

In its 2018 financial statements, the Company created accounting entries for transactions adversely affecting operating performance of the Company and its subsidiaries or, in other words, causing a significant net loss up to Baht 2,040 million. The Company has recorded a provision for impairment loss on investment in the ordinary shares of ASEAN Potash Chaiphaphum Public Company Limited – its associate in which TRC Group holds a 25.13% interest – and an allowance for doubtful debts in respect of the outstanding balance of current assets relating to construction services provided by the Company to the associate. In addition, the Company has also recorded expenses, commitments and other obligations relating thereto as part of project costs. Following the uncertainties causing a delay in the Potash mining project development, all accounting records were prepared on a prudent basis in conformity to accounting standards. Furthermore, the independent auditor's report also addressed under the section Emphasis of Matters two key issues: first, the set up of provision accounts in respect of the Company's investment and construction services provided to the associate and, second, the classification of debentures as current liabilities due to its inability to maintain certain financial ratios as specified in the conditions, for which the Company had informed the intention to redeem the debentures prior to the maturity date by making a tender offer to all debenture holders.

The Board is of the opinion that the 2018 financial statements of the Company and its subsidiaries present their overall financial position and operating results, and that the disclosure of material information in the notes to the financial statements are fairly accurate, in all material respects, in accordance with generally accepted accounting principles.



(Mrs. Paichit Rattananon)  
Chairman of the Board of Directors  
25 February 2019

# 2018 Report of the Remuneration and Nomination Committee

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The Remuneration and Nomination Committee, as duly appointed by the Board of Directors, consists of six members, i.e. four independent directors (Assoc. Prof. Pises Sethsathira, Assoc. Prof. Aekkachai Nittayagasetwat, Ph.D., FRM., Mr. Arun Chirachavala, and Mrs. Puangthip Silpasart) and two executive directors (Mr. Pasit Leesakul and Mrs. Podchanee Phaosavasdi) with independent directors making up the major proportion (four in six members or equivalent to 67%), which is in accordance with good corporate governance principles. The Remuneration and Nomination Committee is basically responsible for considering matters concerning the remunerations and nomination of the Company's directors and top management on the basis of full transparency and fairness.

In 2018, the Remuneration and Nomination Committee held three meetings – in all of which all committee members were present. The results of the Remuneration and Nomination Committee meetings, together with the Committee's viewpoints and recommendation on certain matters, as outlined below were reported to the Board of Directors.

## 1. Remuneration-related matters

- Considering the reports on the 2017 and 2018 assessment of the Board of Directors' and other committees' performance.
- Assessing work performance of Chairman of the Executive Committee, Chief Executive Officer, Chief Marketing Officer, and Chief Operating Officer for 2018.
- Considering the 2018 bonuses as well as the 2019 salaries and remunerations of Chairman of the Executive Committee and Chief Executive Officer before proposing to the Board of Directors meeting for approval.
- Considering, before proposing to the Board of Directors and the 2018 Annual General Meeting of Shareholders, the 2018 remunerations of members of the Board of Directors and of other committees (consisting of the 2017 bonus of directors and the 2018 remunerations of directors) on the basis of the director remuneration criteria that are reasonable and commensurate with each individual director's scope of responsibilities. The Company intends to maintain the director remunerations at a level in close proximity to other enterprises operating in the same industry and competitive enough to attract and retain talented, professional individuals, and to design the remuneration structure that reflects clarity and transparency.
- Considering for approval the budget for the 2018 bonus payment and the 2019 salary increment of the Company and Sahakarn Wisavakorn Company Limited.

## 2. Nomination-related matters

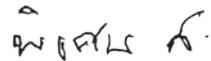
In accordance with the Company's procedures and criteria for director nomination, the Remuneration and Nomination Committee has taken steps to recruit qualified candidates to serve as directors as follows.

- Proposing to the 2018 Annual General Meeting of Shareholders the reappointment of three directors retiring by rotation to continue their directorship for another term.
- Proposing the appointment of Miss Pavita Leesakul; VP of Corporate Affairs Division, as director in replacement of resigning member; Mr. Loh Eng Kee.

### 3. Other matters

- Reviewing, before proposing the 4<sup>th</sup> amended version of 2018 to the Board of Directors for approval, the Remuneration and Nomination Committee Charter and recommending the incorporation of new roles and responsibilities regarding the nomination and remunerations of high-level executive positions immediately below Chief Executive Officer - i.e., Chief Financial Officer, Chief Marketing Officer, Chief Operating Officer, and others (if any).
- Assessing work performance of the Remuneration and Nomination Committee for 2018 before presenting the assessment results to the Board of Directors.

Summarily, the Remuneration and Nomination Committee has been performing the entrusted duties as defined in the Board of Directors' approved Remuneration and Nomination Committee Charter by applying their professional competency with vigilance and sufficient independence in expressing viewpoints and recommendations in the best interests of the Company and all sectors of stakeholders.



(Assoc. Prof. Pises Sethsathira)  
Chairman of the Remuneration  
and Nomination Committee

23 November 2018



# 2018 Report of the Corporate Governance Committee

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Formally established by the Board of Directors since 2012, the Corporate Governance Committee consisting of 3 members – two are independent members while one is holding an executive position in TRC – has been entrusted with the tasks of:- reviewing the Corporate Governance Policy, the Business Code of Conduct, as well as the policies and guidelines related to corporate social and environmental responsibility; proposing guidelines and/or policies related to good corporate governance; providing recommendations on good corporate governance to the Board of Directors; supervising the management's implementation of the Corporate Governance Policy; monitoring, and keeping the Board of Directors informed of, the CSR and environmental activities.

According to the results of the 2018 Corporate Governance of Thai Listed Companies Survey conducted by Thai Institute of Directors Association, TRC has achieved a CG score of "Excellent" level of recognition. To be assured of TRC's continual implementation of corporate governance policies and practices that accord with all 8 principles of SET's Corporate Governance Code for Listed Companies 2017, TRC in 2018 set out to introduce new practices and requirements into its corporate governance-related policies, e.g. periodically reviewing the vision statement, missions, 3-year goals, and corporate value; amending rules and procedures concerning the use of insider information to conform to the Securities and Exchange Act (No.5) B.E. 2559 (2016); incorporating a new Board of Directors meeting agenda requiring every director to perform his/her conflict-of-interest reporting obligations, etc. In addition to disclosing in its 2018 Annual Report and 56-1 Form the implementation results of TRC's most up-to-date Corporate Governance Code, the Corporate Governance Committee together with the Board of Directors has also established a specific timeline of no later than 2019 for the preparation of Sustainability Report and set a goal to maintain its CG score at "Excellent" level perpetually.

With the operational efficiency goal based on good corporate governance and stakeholders' interest at its heart, TRC has provided employees with booklets of Corporate Governance Manual, Business Ethics and Code of Conduct, and the Anti-Fraud and Corruption Policy to ensure their understanding and strict adherence while doing their jobs. We are firmly confident that the adoption of corporate governance principles will reward TRC with heightened competitiveness, growth and long-term wealth to be enjoyed by all shareholders.



(Mr. Arun Chirachavala)  
Chairman of the Corporate  
Governance Committee  
2 November 2018

# 2018 Report of the Risk Management Committee

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Having recognized the importance of effective management of risks that may be detrimental to its business operation, in 2013, TRC Construction Public Company Limited by the Board of Directors appointed individuals, both independent and non-independent (executive level), to serve as members of the Risk Management Committee bestowed with the authority and responsibilities as defined by the Board of Directors and in conformity to TRC's corporate governance framework.

In 2018, the Risk Management Committee held 2 meetings which all Risk Management Committee members attended to consider key matters as outlined below.

1. Reviewing 2018 risk management plan.

TRC's Risk Task Force was working closely with other internal departments to identify and assess risks likely to affect TRC's business operation, taking into account both internal and external factors. The external factors refer to any and all changes taking place economically, socially, and technologically that could endanger TRC's competitive position related to its competitors in the same industry as well as potential newcomer rivals from the substitute industry. The results of risk assessment will be further applied in developing the 2019 risk management plan.

2. Assessing risks

All forms of risks posing threats to TRC's business operation have been assessed, i.e. Strategic Risk, Financial Risk, Operational Risk, and Compliance Risk. The Risk Management Committee has perused its risk management plan to ensure that all key risks would be successfully contained to a controllable level and all objectives earlier defined would be fulfilled.

3. Managing risks, monitoring and overseeing risk management activities.

Risk Management Committee has monitored the implementation of risk management plan and activities performed by Risk Task Force and, where necessary, provided them the practical advice and recommendations to maximize the efficacy of the plan.

4. Reviewing the current Risk Management Committee Charter.

After consideration, concluded that it still fits the present situation and advised the Board of Directors to continue using it without making any change.

5. Evaluating the 2018 performance of the Risk Management Committee.

The Risk Management Committee has duly performed its duties and is of the opinion that TRC had in place the effectively and systematically implemented risk management scheme which is instrumental in enhancing smooth business operation, lowering the chance of potential damage, and minimizing the magnitude of unavoidable, impending setbacks afflicting the business down to the acceptable and controllable level. In addition, TRC has put in place the preventive and regulatory mechanism that could effectively protect TRC's business operation from the identified risks. TRC is currently working on developing more programs to handle risks and build sustainable wealth to be enjoyed by shareholders and stakeholders.



(Mr. Arun Chirachavala)  
Chairman of the Risk Committee  
23 November 2018

# Board of Directors and Executives



**Mrs. Paichit Rattananon**

**Chairman of the Board  
and Authorized Director**  
Age : 63 years old

Appointment Date to be TRC's Director :	25 April 2005
Tenure as the director :	13 years 8 months ( until December 2018)
Attendance in Board of Directors meetings during year 2018 :	6/7
Shareholding in TRC as at 31 December 2018 :	28.660% (1,766,385,830 shares) Directly and indirectly holds the shares through KPK 1999 Co., Ltd. in which Mrs. Paichit holds 50.50% of its shares
Family Relationship among Executives :	Mother of Mr. Pasit Leesakul, Director and Chief Executive Officer and Ms. Pavita Leesakul, Director and Vice President, Corporate Affairs Division
Education :	Master of Arts in Political Economy, Faculty of Economics, Chulalongkorn University

## Training :

Institution	Program
Thai Institute of Director Association	- Director Certification Program (DCP) 142/2011 - Role of the Chairman Program (RCP) 15/2007 - Director Accreditation Program (DAP) 38/2005
The National Defense College of Thailand	National Defense College 48 (NDC 48)
Capital Market Academy	Capital Market Academy Leader Program 5 (CMA 5)
Thailand Energy Academy	Energy Academy Leader Program 6 (TEA 6)
King Prajadhipok's Institute	Intermediate Certificate Course Good Governance for Medical Executives #6

## Working Experience in the last 5 years :

### TRC Construction Public Company Limited

Year	Position
2005 - present	Chairman

Position in other listed companies : None

Position in other non-listed companies : 3 companies

Year	Position	Company	Business Type
2015 - present	Chairman	Sahakarn Wisavakorn Company Limited	Construction Services
2013 - present	Director	Sahakarn Wisavakorn Company Limited	Construction Services
2008 - present	Director	TRC International Limited (Hong Kong)	Investment and bidding of new projects
2002 - present	Managing Director	KPK 1999 Company Limited	Property Rental
2004 - 2015	Managing Director	Thai Tokushukai Company Limited	Hospital Activities

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



**Assoc. Prof. Aekkachai Nittayagasetwat, PH.D., FRM.**  
**Independent Director, Chairman of Audit Committee,**  
**Remuneration and Nomination Committee and Risk Management Committee**  
 Age : 55 years old

**Appointment Date to be TRC's Director :** 25 April 2005  
**Tenure as the director :** 13 years 8 months (until December 2018)

**Attendance in meetings during year 2018 :**

Board of Directors	Audit Committee	Remuneration and Nomination Committee	Risk Committee
7/7	4/4	3/3	2/2

**Shareholding in TRC as at 31 December 2018 :** 0.092% (5,692,497 shares)

**Family Relationship among Executives :** None

**Education :** PH.D. in Finance, University of Mississippi, U.S.A.

**Training :**

Institution	Program
Thai Institute of Director Association	- Risk Management Committee (RMC) 10/2013 - Role of the Compensation Committee (RCC) 12/2011 - Compensation Survey 1/2011 - Director Accreditation Program (DAP) 35/2005

**Working Experience in the last 5 years :**

**TRC Construction Public Company Limited**

Year	Position
2016 - present	Risk Management Committee
August 2014 - present	Chairman of Audit Committee
2009 - present	Remuneration and Nomination Committee
2005 - July 2014	Audit Committee

**Position in other listed companies :** 4 companies

Year	Position	Company	Business Type
2011 - present	Independent Director, Audit Committee Member and Remuneration Committee Member	Stars Microelectronics (Thailand) Public Company Limited "SMT"	Electronic components
	Independent Director, Audit Committee and Chairman of the Risk Committee	Panjawattana Plastic Public Company Limited "PJW"	Industrial
2010 - present	Independent Director, Chairman of the Audit Committee, Chairman of the Corporate Governance Committee, Member of Nomination and Remuneration Committee Member of Risk Management Committee	UAC Global Public Company Limited "UAC"	Industrial

Year	Position	Company	Business Type
2008 - present	Independent Director and Chairman of Audit Committee	GETABEC Public Company Limited "GTB"	Industrial

Position in other non-listed companies : 2 companies

Year	Position	Company	Business Type
2009 - present	Independent Director and Audit Committee	GT Wealth Management Company Limited	Derivatives Representative
1995 - present	Associate Professor	NIDA Business School National Institute of Development Administration	Educational institution

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



## Mr. Arun Chirachavala

Independent Director, Chairman of Corporate Governance Committee,  
Chairman of Risk Management Committee,  
Audit Committee and Remuneration and Nomination Committee  
Age : 65 years old

Appointment Date to be TRC's Director :

18 June 2009

Tenure as the director :

9 years 6 months (until December 2018)

Attendance in meetings during year 2018 :

Board of Directors	Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Committee
7/7	4/4	3/3	1/1	2/2

Shareholding in TRC as at 31 December 2018 :

0.066% (4,049,999 shares)

Family Relationship among Executives :

None

Education :

Master of Industrial Engineering, Stanford University, U.S.A.

Training :

Institution	Program
Thai Institute of Director Association	- Director Certification Program (DCP) 88/2007 - Director Accreditation Program (DAP) 34/2005

Working Experience in the last 5 years:

TRC Construction Public Company Limited

Year	Position
2014 - present	Audit Committee and Remuneration and Nomination Committee
2013 - present	Chairman of Risk Management Committee
2012 - present	Chairman of Corporate Governance Committee
2009 - present	Independent Director

Position in other listed companies : 2 companies

Year	Position	Company	Business Type
2015 - present	Independent Director and Audit Committee	Bangkok Bank Public Company Limited "BBL"	Commercial Bank
2007 - present	Independent Director, Audit Committee and Nomination and Remuneration Committee	Krungdhep Sophon Public Company Limited "KWC"	Transportation and Logistics
2008 - 2015	Independent Director and Chairman of Audit Committee	United Overseas Bank (Thai) Public Company Limited "UOB"	Commercial Bank

Position in other non-listed companies : 1 company

Year	Position	Company	Business Type
2006 - present	Director	Palang Sophon Company Limited	Petroleum and natural gas production
2009 - 2015	Chairman	K.W.C. Warehouse Company Limited	Utility services
2008 - 2014	Chairman	Krungdhep Document Company Limited	Host computer rental

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None





## Mrs. Puangthip Silpasart

Independent Director, Audit Committee and  
Remuneration and Nomination Committee

Age : 64 years old

Appointment Date to be TRC's Director :

24 February 2016

Tenure as the director :

2 years 10 months (until December 2018)

Attendance in meetings during year 2018 :

Board of Directors	Audit Committee	Remuneration and Nomination Committee
7/7	4/4	3/3

Shareholding in TRC as at 31 December 2018 :

None

Family Relationship among Executives :

None

Education :

Bachelor of Arts (B.A.), English Major, Silpakorn University

Training :

Institution	Program
Thai Institute of Director Association	- Director Certification Program (DCP) 226/2016 - Role of the Chairman Program (RCP) 38/2016
Ministry of Industry	Top Executive Program in Industrial Development and Investment (IBID) 2/2015
Thailand Energy Academy, PTT Public Company Limited	Executive Program in Energy Literacy for a Sustainable Future (TEA) 6/2015
Chula Unisearch, Chulalongkorn University	Power of the Kingdom 2/2014
The Electronic Government Agency (Public Organization) (EGA)	E-government Executive Program (CIO) 3/2013
The National Intelligence Agency	National Security Management Course (NSMC) 2/2010
The Office of the Civil Services Commission	The Civil Service Executive Program for Senior Civil Servants (Visionary Leadership: Program 1) 53/2007
Exploration and Production of Petroleum Training Institute, Paris, France	Organizational Restructuring Program
The Office of the Permanent Secretary, Ministry of Energy	Energy Executive Development Program
Sasin Graduate Institute of Business Administration of Chulalongkorn University	Senior Executive Program

Working Experience in the last 5 years :

TRC Construction Public Company Limited

Year	Position
2016 - present	Independent Director, Audit Committee and Remuneration and Nomination Committee

Position in other listed companies : 1 company

Year	Position	Company	Business Type
2016 - present	Independent Director, Audit Committee, Nomination and Remuneration Committee and Risk Committee	Thai Sugar Terminal Public company limited "TSTE"	Transportation & Logistics
2015 - 2017	Director and Corporate Gov- ernance and Social Respon- sibility Committee	The Electricity Generating Public Company Limited "EGCO"	The Electricity Generating Public Com- pany Limited "EGCO"

Position in other non-listed companies : 1 company

Year	Position	Company	Business Type
2015 - present	Executive Director	Technical Petroleum Training Institute	The core institute in providing international standards for training courses in the petroleum exploration and production business.
2014 - 2015	Director-General	Department of Mineral Fuels, Ministry of Energy	Government Services
2013 - 2014	Deputy Director-General	Department of Mineral Fuels, Ministry of Energy	Government Services
2008 - 2013	Director, Central Administration Bureau	Department of Mineral Fuels, Ministry of Energy	Government Services

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



## Assoc. Prof. Pises Sethsathira

Independent Director, Chairman of Remuneration and Nomination Committee  
and Corporate Governance Committee

Age : 62 years old

Appointment Date to be TRC's Director :

25 April 2005

Tenure as the director :

13 years 8 months (until December 2018)

Attendance in meetings during year 2018 :

Board of Directors	Remuneration and Nomination Committee	Corporate Governance Committee
7/7	3/3	1/1

Shareholding in TRC as at 31 December 2018 :

0.066% (4,049,999 shares)

Family Relationship among Executives :

None

Education :

Master of Laws (LL.M), Columbia University, U.S.A.

Training :

Institution	Program
Thai Institute of Director Association	- Audit Committee Program (ACP) 17/2007 - Director Accreditation Program (DAP) 35/2005

Working Experience in the last 5 years :

TRC Construction Public Company Limited

Year	Position
2016 - present	Corporate Governance Committee
2009 - present	Chairman of Remuneration and Nomination Committee
2005 - present	Independent Director
2005 - 2013	Audit Committee

Position in other listed companies :

Year	Position	Company	Business Type
2010 - 2014	Executive Vice President, Banking Finance 1 and Capital Market Division	Siam Commercial Bank Public Company Limited "SCB"	Commercial Bank
1991 - 2012	Independent Director and Audit Committee	Thailand Iron Works Public Company Limited "TIW"	Zinc production

Position in other non-listed companies : None

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



**Mr. Smai Leesakul**  
**Authorized Director**  
**and Chairman of Executive Committee**  
 Age : 63 years old

**Appointment Date to be TRC's Director :** 9 May 2007  
**Tenure as the director :** 11 years 7 months (until December 2018)

**Attendance in meetings during year 2018 :**

Board of Directors	Executive Committee
6/7	1/1

**Shareholding in TRC as at 31 December 2018 :** 1.102% (67,905,961 shares)

**Family Relationship among Executives :** Father of Mr. Pasit Leesakul, Director and Chief Executive Officer and Ms. Pavita Leesakul, Director and Vice President, Corporate Affairs Division

**Education :** Master of Management, SASIN Graduate Institute of Business Administration of Chulalongkorn University

**Training :**

Institution	Program
Thai Institute of Director Association	- Financial Statements for Directors (FSD) 18/2012 - Director Accreditation Program (DAP) 64/2007
The Federation of Thai Industries	BRAIN: Business Revolution and Innovation Network 1
Thailand Energy Academy	Top Executive Program in Energy (TEA 8)
Commerce Academy, University of the Thai Chamber of Commerce	Top Executive Program in Commerce and Trade (TEPCoT 5)
Urban Green Development Institute Bangkok	Bangkok Metropolitan Administration Executive Program (Mahanakorn 1)
The National Defense College of Thailand	The Joint State-Private Sector Course (NDC 16)
Capital Market Academy	Capital Market Academy Leader Program (CMA 7)

**Working Experience in the last 5 years :**

**TRC Construction Public Company Limited**

Year	Position
2015 - present	Chairman of Executive Committee
2007 - present	Director
2013 - 2015	Risk Management Committee and Chairman of Management Committee
2009 - 2015	Remuneration and Nomination Committee
2007 - 2015	Chief Executive Officer

**Position in other listed companies :** None

Position in other non-listed companies : 8 companies

Year	Position	Company	Business Type
2017 - present	Director	Thai Listed Companies Association	-
2016 - present	Vice Chairman of the Federation of Thai Industries and Chairman of Institute of Agro-based Industries	The Federation of Thai Industries	-
2015 - present	Director, Chief Executive Officer and Managing Director	ASEAN Potash Chaiyaphum Public Company Limited	Potash mining
2011 - present	Director	TRC Engineering LLC (Sultanate of Oman)	Construction Services
2010 - present	Director	TRC Middle East LLC (Sultanate of Oman)	Construction Services
2008 - present	Director	TRC International Limited (Hong Kong)	Investment and bidding of new projects
	Director	TRC Investment Limited (Mauritius)	Investment and bidding of new projects
2007 - present	Director	Sahakarn Wisavakorn Company Limited	Construction Services
2007 - 2015	Chief Executive Officer	Sahakarn Wisavakorn Company Limited	Construction Services
2014	Chairman	Thailand Post Distribution Company Limited	Cargo and Warehouse Services
2012 - 2014	Vice Chairman	Thailand Post Company Limited	Postal Services
2002 - 2013	General Secretary	The Federation of Design and Construction Services of Thailand (FEDCON)	-

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



## Mrs. Podchane Phasavasdi

Authorized Director, Chief Commercial Officer and Vice President, Commercial Division, Remuneration and Nomination Committee, Corporate Governance Committee, Risk Management Committee, Management Committee Executive Committee and Acting Vice President, Commercial Division  
Age : 58 years old

Appointment Date to be TRC's Director :

9 August 2007

Tenure as the director :

11 years 4 months (until December 2018)

Attendance in meetings during year 2018 :

Board of Directors	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Committee	Executive Committee	Management Committee
7/7	3/3	1/1	2/2	1/1	2/2

Shareholding in TRC as at 31 December 2018 :

None

Family Relationship among Executives :

None

Education :

Master of Business Administration-Marketing, Ramkhamhaeng University

Training :

Institution	Program
Thai Institute of Director Association	- Risk Management Committee Program (RMP) 4/2014 - Director Certification Program (DCP) 151/2011 - Role of the Compensation Committee (RCC) 9/2009 - Director Accreditation Program (DAP) 64/2007
The Faculty of Economics, Chulalongkorn University	Risk Management Certificate Program 3/2014
The Institute of Industrial Energy, the Federation of Thai Industries	Energy Symposium 2016
The Federation of Thai Industries	4.0 Thailand Industrial Development Strategy
KPMG Thailand	2017 ASEAN Infrastructure and PPP Outlook : KPMG Executive Briefing

Working Experience in the last 5 years :

TRC Construction Public Company Limited

Year	Position
2015 - present	Executive Committee, Chief Commercial Officer and Acting Vice President, Commercial Division
2013 - present	Remuneration and Nomination Committee and Risk Management Committee
2012 - present	Corporate Governance Committee
2007 - present	Director and Management Committee

Position in other listed companies : 1 company

Year	Position	Company	Business Type
2013 - present	Independent Director, Audit Committee and Remuneration and Nomination Committee	Aqua Corporation Public Company Limited "AQUA"	Media & Publishing Services



Position in other non-listed companies : 7 companies

Year	Position	Company	Business Type
2017 - present	Director	SH Crossings Company Limited	Construction Services
2017 - present	Director	TRC Utility Company Limited	Investment of the infrastructure projects
2016 - present	Director	ASEAN Potash Chaiyaphum Public Company Limited	Potash mining
2015 - present	Executive Committee, Chief Commercial Officer and Vice President, Commercial Division	Sahakarn Wisavakorn Company Limited	Construction Services
2011 - present	Director	TRC Engineering LLC (Sultanate of Oman)	Investment and bidding of new projects
	Director	TRC Middle East LLC (Sultanate of Oman)	Investment and bidding of new projects
2006 - present	Director	Sahakarn Wisavakorn Company Limited	Construction Services

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



### Mr. Pasit Leesakul

Authorized Director, Chief Executive Officer, Chairman of Management Committee, Remuneration and Nomination Committee, Risk Management Committee, Executive Committee and Acting Chief Financial Officer  
Age : 35 years old

Appointment Date to be TRC's Director :

21 March 2013

Tenure as the director :

5 years 9 months (until December 2018)

Attendance in meetings during year 2018 :

Board of Directors	Remuneration and Nomination Committee	Risk Committee	Executive Committee	Management Committee
7/7	3/3	2/2	1/1	2/2

Shareholding in TRC as at 31 December 2018 :

0.114% (7,019,999 shares)

Family Relationship among Executives :

Son of Mr. Smai Leesakul, Director and Chairman of Executive Committee and Mrs. Paichit Rattananon, Chairman and brother of Ms. Pavita Leesakul, Director and Vice President, Corporate Affairs Division

Education :

Master of Business Administration: Corporate Finance Concentration, McCollum Graduate School of Business, Bentley University, U.S.A.

Training :

Institution	Program
Thai Institute of Director Association	Director Accreditation Program (DAP) 105/2013
Thai Listed Companies Association	- TLCA Leadership Development Program (LDP 4) - TLCA Executive Development Program (EDP 7)
Training of military personnel of Petroleum and Energy	The Management of the Expiring Petroleum Concessions
Econ Chula Association, Chulalongkorn University	Ultra Wealth Program 1 (UW 1)
Academy of Business Creativity, Sripatum University	Difference: How to Harness Business Creativity Program (ABC 3)
Faculty of Police Science, Royal Police Cadet Academy	Young Executive Program for law Enforcement (YPL 1)
King Prajadhipok's Institute	Political Leadership in the New Era Program (PNP 2)
NIDA-Wharton	NIDA Executive Leadership Program (ELP 5)

Working Experience in the last 5 years :

TRC Construction Public Company Limited

Year	Position
2018 - present	Acting Chief Financial Officer
February - September 2018	Acting Chief Operation Officer
2015 - present	Chief Executive officer, Executive Committee, Chairman of Management Committee, Remuneration and Nomination Committee and Risk Management Committee
2013 - present	Director

Year	Position
2011 - present	Management Committee
2013 - 2015	Executive Vice President
2012 - 2015	Vice President, Commercial Division
2010 - 2012	Acting Vice President, Project Development and Investment Division

Position in other listed companies : None

Position in other non-listed companies : 5 companies

Year	Position	Company	Business Type
2017 - present	Director	SH Crossings Company Limited	Construction Services
2017 - present	Director	TRC Utility Company Limited	Investment of the infrastructure projects
2015 - present	Chief Executive Officer	Sahakarn Wisavakorn Company Limited	Construction Services
2014 - present	Director	Thai Investor Relations Club	-
2012 - present	Director	Sahakarn Wisavakorn Company Limited	Construction Services

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



**Ms. Pavita Leesakul**  
**Director and Vice President,**  
**Corporate Affairs Division**  
 Age : 32 years old

**Appointment Date to be TRC's Director :**

8 August 2018

**Tenure as the director :**

4 months (until December 2018)

**Attendance in meetings during year 2018 :**

Board of Directors	Corporate Governance Committee	Management Committee
1/7	*	2/2

\* Appointment as at 8 August 2018 and Appointing as the Corporate Governance Committee as at 22 November 2018

**Shareholding in TRC as at 31 December 2018 :**

0.184% (11,343,479 shares)

**Family Relationship among Executives :**

Daughter of Mrs. Paichit Rattananon, Chairman and Mr. Smai Leesakul, Director and Chairman of Executive Committee and sister of Mr. Pasit Leesakul, Director and Chief Executive Officer Master of Arts, International Economics and Finance, Keio University, Japan and Brandeis International Business School, U.S.A.

**Education :**

**Training :**

Institution	Program
Thai Institute of Director Association	- How to Develop a Risk Management Plan (HRP) 11/2016 - Director Accreditation Program (DAP) 151/2018
Thai Listed Companies Association	TLCA Executive Development Program (EDP 16)
The Federation of Thai Industries	Young F.T.I. Elite # 3
Academy of Business Creativity, Sripatum University	ABC Talent: Grooming Rising Professionals

**Working Experience in the last 5 years :**

**TRC Construction Public Company Limited**

Year	Position
August 2018 - present	Director
2016 - present	- Vice President, Corporate Affairs Division - Acting Corporate Communication Department Manager - Acting Material Management and Logistics Department Manager - Acting Human Resources Department Manager - Acting Legal Department Manager
2016 - 2017	Corporate Communication Manager
2014 - 2015	Senior Purchase Officer

Position in other listed companies :

Year	Position	Company	Business Type
2013	Corporate Communication Officer	Golden Land Property Development Public Company Limited "GOLD"	Property Development

Position in other non-listed companies : 1 company

Year	Position	Company	Business Type
2017 - present	Director	TRC Utility Company Limited	Investment of the infrastructure projects

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



**Mr. Loh Eng Kee**  
 Chief Operating Officer,  
 Management Committee and Executive Committee  
 Age : 61 years old

**Shareholding in TRC as at 31 December 2018 :** 0.021% (1,315,574 shares)  
**Family Relationship among Executives :** None  
**Education :** Technical Diploma in Mechanical Engineering, Singapore Polytechnic, Singapore

**Training :**

Institution	Program
Thai Institute of Director Association	Director Accreditation Program (DAP) 74/2008

**Working Experience in the last 5 years :**  
**TRC Construction Public Company Limited**

Year	Position
October 2018 - present	Chief Operating Officer and Acting Vice President
2017 - September 2018	Deputy Chief Operating Officer
2015 - August 2018	Director
2015 - present	Executive Director and Management Committee
2013 - 2017	Project Director

**Position in other listed companies :** None

**Position in other non-listed companies :** None

Year	Position	Company	Business Type
2005 - 2013	Project Director	Rotary Engineering Limited, Singapore	Engineering and related technical consulting
2005 - 2013	Managing Director	Thai Rotary Engineering Public Company Limited	Engineering and related technical consulting

**Position in the rival company/related to the company :** None

**Criminal offense record during the past 10 years :** None





**Mr. Chaveng Reesrikitti**  
**Management Committee**  
**and Chief Operating Officer**  
 Age : 60 years old

Shareholding in TRC as at 31 December 2018 : 0.009% (532,439 shares)  
 Family Relationship among Executives : None  
 Education : Bachelor of Mechanical Engineering, Chiang Mai University

Working Experience in the last 5 years:

TRC Construction Public Company Limited

Year	Position
2017 - present	Deputy Chief Operating Officer
2005 - present	Management Committee
2013 - 2017	Vice President, Operation 2 Division
1999 - 2013	Assistant Vice President, Operation Division

Position in other listed companies : None

Position in other non-listed companies : 1 company

Year	Position	Company	Business Type
2009 - present	Director	Sahakarn Wisavakorn Company Limited	Construction Services

Position in the rival company/related to the company : None

Criminal offense record during the past 10 years : None



**Ms. Ounruen Sujarittam**  
**Senior Finance and Investor Relations Manager**  
**and Company Secretary**  
 Age : 51 years old

**Shareholding in TRC as at 31 December 2018 :** None

**Family Relationship among Executives :** None

**Education :** Master of Business Administration-Finance, National Institute of Development Administration  
 Bachelor of Faculty of Commerce and Accountancy, Chulalongkorn University

**Training :**

Institution	Program
Thai Institute of Director Association	- Director Accreditation Program 113/2014 - Company Secretary Program (CSP) 11/2005
Thai Listed Companies Association	Corporate Secretary Development Program 15/2007

**Working Experience in the last 5 years :**  
**TRC Construction Public Company Limited**

Year	Position
2013 - present	Senior Finance and Investor Relations Manager
2007 - present	Company Secretary
2004 - 2013	Corporate Finance Manager

**Position in other listed companies :** None

**Position in other non-listed companies :** 2 companies

Year	Position	Company	Business Type
2016 - present	Independent Director and Audit Committee	UAC Advance Polymer and Chemicals Company Limited	Manufactures and supplies chemicals, with latex emulsions and latex polymer as the main product for various industries
2015 - present	Company Secretary	ASEAN Potash Chaiyaphum Public Company Limited	Potash mining
2013 - January 2019	Independent Director and Audit Committee	Thai Packaging Industry Public Company Limited	Packaging products and corrugated fiberboard

**Position in the rival company/related to the company :** None

**Criminal offense record during the past 10 years :** None



**Ms. Rewadee Ardarn**  
**Senior Accounting Manager**  
Age : 50 years old

**Shareholding in TRC as at 31 December 2018 :** 0.019% (163,249 shares)  
**Family Relationship among Executives :** None  
**Education :** Master of Business Administration-Management,  
Eastern Asia University

**Training :**

Institution	Program
Thai Listed Companies Association	Strategic Financial Leadership Program (SFLP)

**Working Experience in the last 5 years :**  
**TRC Construction Public Company Limited**

Year	Position
2000 - present	Senior Accounting Manager

**Position in other listed companies :** None  
**Position in other non-listed companies :** None  
**sition in the rival company/related to the company :** None  
**Criminal offense record during the past 10 years :** None

# 1. Financial Highlights

The Company's financial information	Unit	2018	2017	2016
<b>Income Statements</b>	Million Baht			
Construction services income		2,256.65	2,370.13	3,697.30
Earnings before interest, tax, depreciation, amortization, bad debt and loss from impairment on investment in associate		-275.88	290.33	399.33
Net profit attributable to equity holders of the Company		-2,040.57	92.79	290.76
<b>Statements of Financial Position</b>	Million Baht			
Total assets		3,055.78	4,598.38	5,003.16
Total liabilities		2,352.76	1,842.55	2,319.31
Shareholders' equity and non-controlling interests		-29.29	-27.67	-28.71
Equity attributable to owners of the Company		732.31	2,783.49	2,712.56
<b>Information about Common Shares</b>				
Number of issued and paid-up ordinary shares	Million shares	6,163.17	5,869.69	5,135.99
Book value per share	Baht	0.11	0.47	0.52
Earnings per share	Baht	-0.331	0.016	0.050
Dividend per share	Baht	-	0.00825	0.0218571
Dividend payout ratio	%	-	47.86	30.01
<b>Financial Ratio</b>				
Gross profit margin	%	-0.04	21.54	20.30
Net profit margin	%	-0.89	3.81	7.78
Return on equity	%	-117.99	3.41	11.39
Return on assets	%	-0.53	1.93	6.07
Debt to equity	(Time(s))	3.35	0.67	0.86
Interest-Bearing Debt-to-Equity Ratio*	(Time(s))	1.09	0.15	0.16
EBITDA to interest ratio**	(Time(s))	-87.79	15.36	26.88

Formula in accordance to the specification pertaining to the rights and duties of the debentures issuer and debentures holders

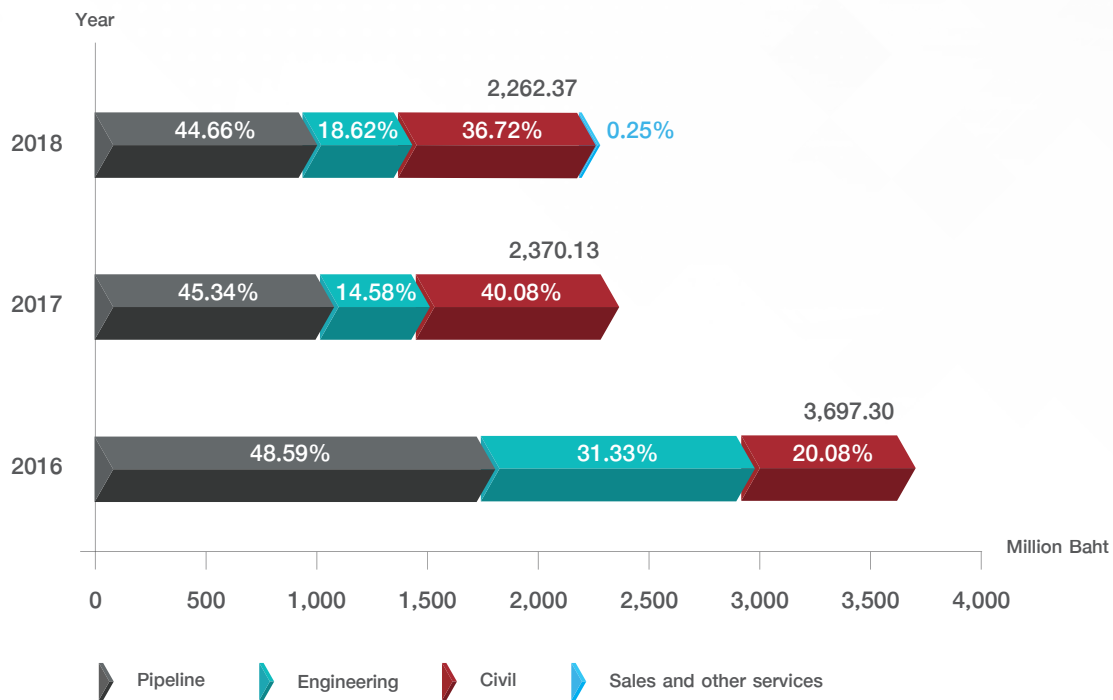
\* Interest Bearing Debt to Equity Ratio refer to liabilities of a debentures issuer that require the payment of interest

\*\* EBITDA to interest ratio refers to net profit as stated in the consolidated financial statements of the debentures issuer plus interest, income tax, depreciation fee, amortization fee, amortization of goodwill fee, discount amortization fee, allowance for doubtful debt, divided by interest (excluding interest from financial lease)

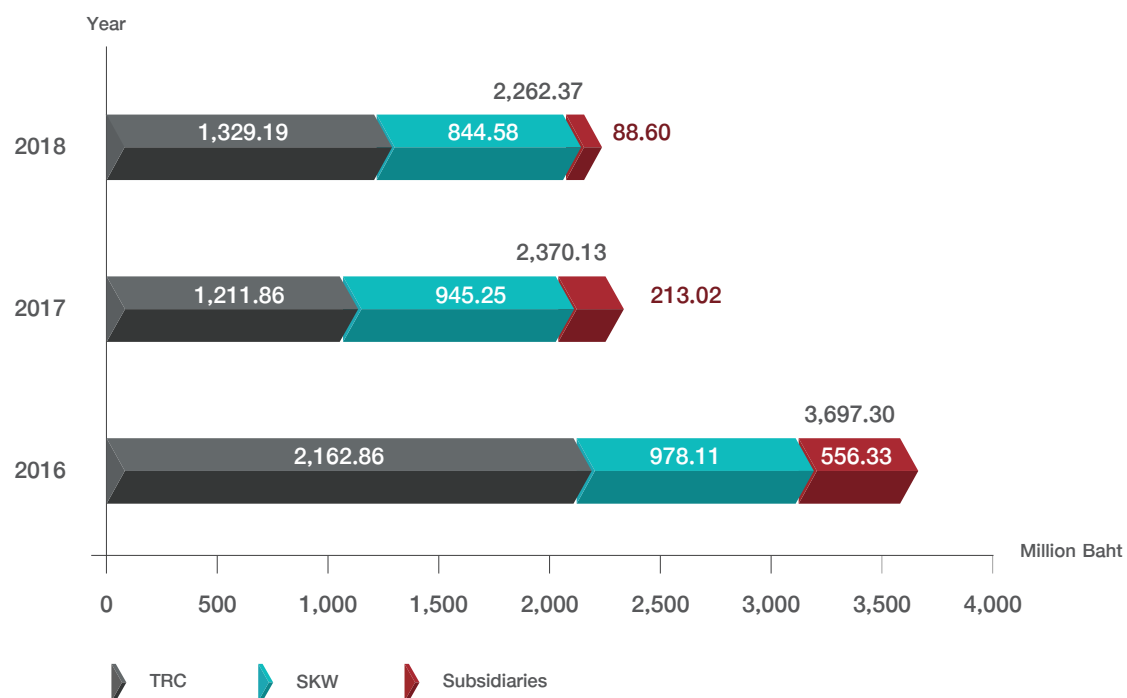
# Financial Highlights

## Construction services income and sales

### By Segment

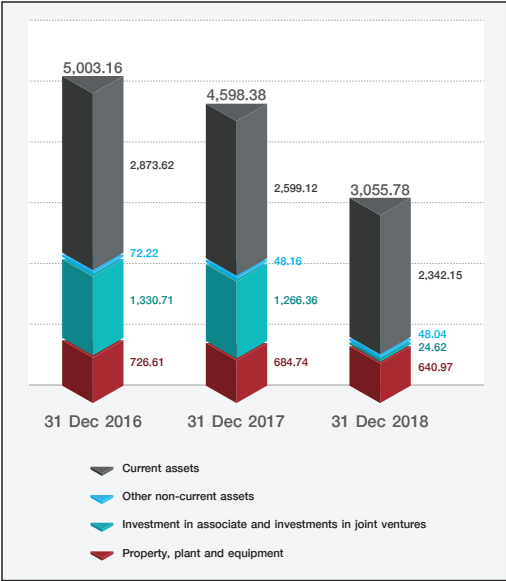


### By Company

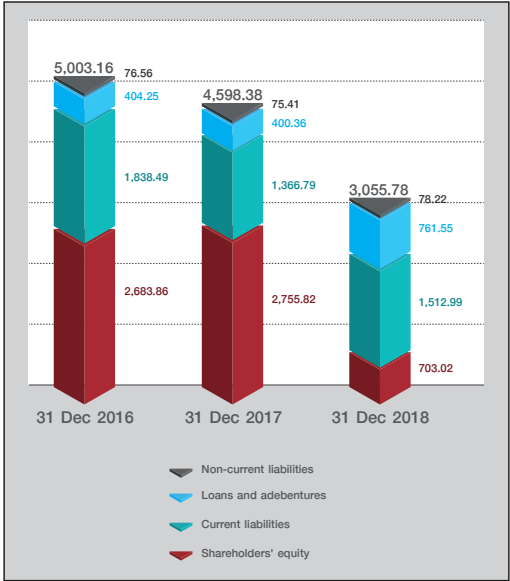


# Statement of financial position

Total assets

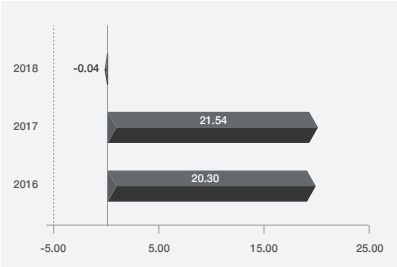


Total liabilities and shareholders' equity

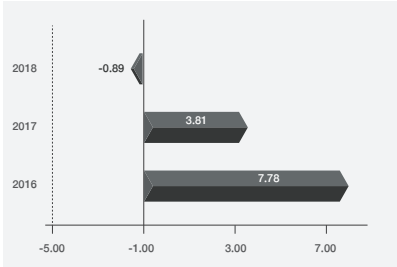


# Financial Ratio

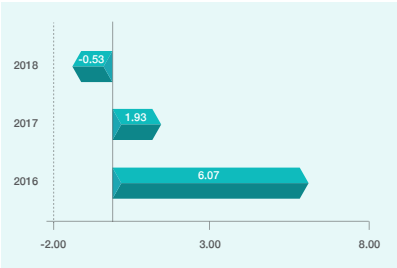
Gross profit margin (%)



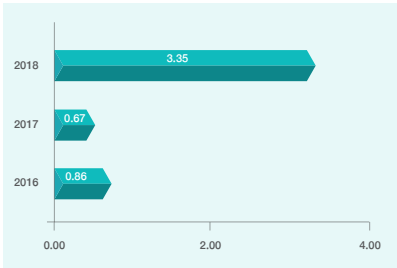
Net profit margin (%)



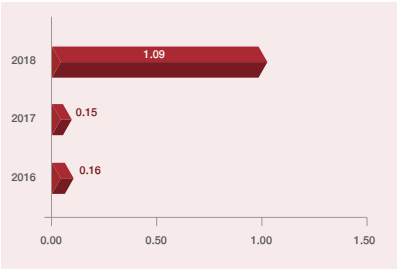
Retrun on assets (%)



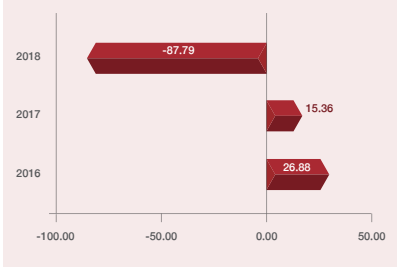
Debt to equity (Time(s))



Interest-Bearing Debt-to-Equity Ratio (Time(s))



EBITDA to interest (Time(s))



# 2. Business Policy and Overview

## 1. Business Policy and Overview

TRC Construction Public Company Limited was established in November 20, 1998. The Company provides integrated contracted services relating to engineering, procurement of machineries and equipment and construction (EPC). The Company has vast experience and expertise projects related to water, natural gas and petrochemical pipeline. Apart from providing construction services, the Company involved in project development and investments. The Company has a subsidiary – Sahakorn Wisavakorn Co., Ltd., which specialized in civil engineering works and infrastructure system. The TRC Group steadily expanded its capital base and business operations. In 2018, the Company expanded its scope of business to include new innovation business, such as contracted construction of Automated Storage and Retrieval System (AS/ RS). Core clients of the Company are business operators in the energy and petrochemical sectors, as well as state agencies.

TRC Construction Public Company Limited was initially listed on the Market for Alternative Investment (MAI) under the trading name of “TRC” on November 22, 2005. TRC Construction Public Company Limited later switched to list on The Stocks Exchange of Thailand (SET) under the real estate and construction sector of the property development category on April 23, 2013. However, TRC Construction Public Company Limited stocks was moved by SET to trade under the construction services sector since January 2, 2014.

### Vision, Mission, Target and Corporate Value

The Company has a policy to periodically review the vision and mission statements, corporate objectives every 5 years. The latest review was at the 7/2018 Board of Directors’ meeting held on November 12, 2018. The Board of Directors has reviewed and approved the vision and mission statements, corporate objectives and corporate values as follows:

- **Vision**

“A Pioneer Organization who delivers innovative project solution in the region” (CLMVT\*)

\* comprised of Cambodia, Laos, Myanmar (Burma), Vietnam and Thailand.

- **Mission**

1. **To our shareholders and partners**

We will deliver sustainable returns through good governance.

2. **To our customer**

We will deliver excellent service with high quality, environmental and safety awareness to ensure our clients’ success.

3. **To our society**

We will conduct business with good corporate responsibility.

4. **To our employees**

We will create best working environment and become the best operational – excellence organization.



- **3-Year Aspiration (2019 - 2021)**

1. Top 10 in total revenue in construction service industry
2. Top 5 in net profit margin in construction service industry (% of revenue)
3. Dividends from investment >100 MB with threshold >15%

- **Corporate Value**

1. B = Be Innovative                      Innovation-Driven Organization
2. E = Energetic                          Relentless Strive Forward
3. T = Target-Oriented                  Results-Oriented
4. R = Respect & Trust                  Be Respectful, Have Confidence and Trust for Others
5. C = Commitment                      Commitment to quality, safety at all times, environmental preservation, and social responsibility

## 2. Key Changes and Accomplishments

During the past 5 years, the Company's accomplishments in expanding its business and securing large-scale projects on an ongoing basis are outlined below:

### In 2014

- The Company was awarded 2 major projects as follows:
  1. Construction of New Bio-Diesel Plant with a production capacity of 450 tons per day awarded by Bangchak Bio Fuel Company Limited, worth Baht 1,226.35 million.
  2. Waste Gas Incinerator Installation Project at Chana Gas Separation Plant, Songkhla awarded by Trans Thai-Malaysia (Thailand) Limited, worth Baht 519 million and USD 11.33 million. (Baht 919.50 million)
- On June 23, 2014, the Company and Sahakarn Wisavakorn Co., Ltd. moved their head office to No. 8 Soi Sukhaphiban 5 Soi 32, Tha Raeng Sub-District, Bang Khen District, Bangkok. The new office building is 6-storey high and built on a 7 Rai, 1 Ngan, 45 sq. Wah plot of land wholly owned by the Company.
- TRC International Limited purchased additional TRC Middle East LLC shares, resulting in an increase in shareholding in TRC Middle East LLC from 60% to 70%.
- Directors, executives, and employees had their warrants converted to ordinary shares in the 1<sup>st</sup> - 3<sup>rd</sup> exercise of rights under ESOP-W2 program. There was a total of 5,954,933 new shares from these exercises of ESOP-W2 warrants. The Company's registered capital and paid-up capital as of December 31 2014 were Baht 425,514,869 and Baht 411,306,853 respectively.

### In 2015

- The Company and Sahakarn Wisavakorn Co., Ltd. were awarded 4 major projects as follows:

1. 1<sup>st</sup> Transmission Pipeline Life Extension Project: 28" Recoating Section (RC-400) awarded by PTT Public Company Limited, worth Baht 3,725 million. (later in 2018, the project value was adjusted to Baht 3,237 million)
2. Three projects awarded to Sahakarn Wisavakorn Co., Ltd. included:
  - Construction of Srinakarin-Romklao Road, Phase 1 awarded by Bangkok Metropolitan Administration, the Metropolitan Electricity Authority, the Metropolitan Waterworks Authority, worth Baht 1,089.32 million.
  - Construction, improvement and expansion of waterworks phase 1, part 2 in Koh Samui District, Surat Thani Province operated under the administration of the Provincial Waterworks Authority, Koh Samui Branch. This project, worth Baht 855.23 million and undertaken in the name of Hydrotek Sahakarn Joint Venture, was awarded by the Provincial Waterworks Authority.
  - Supply, installation, and commissioning of cigarette making machinery and equipment used in the dry-ice expanded tobacco (DIET) process (M-01/2) awarded by Thailand Tobacco Monopoly, Ministry of Finance, worth Baht 237.21 million and EUR 15.48 million, or equivalent to Baht 834.14 million
- In March 2015, the 3/2015 Board of Directors' meeting resolved to approve the appointment of Mr. Pasit Leesakul as the Company's director and Chief Executive Director. The appointment became effective from April 1, 2015 onward.
- In April 2015, The 2015 Annual General Meeting of Shareholders passed its resolutions in relation to the registered capital, the issuance and offering of debentures, and the adjustment to ESOP-W2 entitlements as follows:
  - Approved for the change to par value of the ordinary shares from Baht 0.50 to Baht 0.125
  - Approved for the issuance and private placement of debentures of up to Baht 500 million
  - Approved for the issuance and private placement of debentures of up to Baht 2,000 million
  - Approved for the reduction in registered capital from Baht 425,514,868.50 to Baht 423,741,039
  - Approved for the issuance and private placement, under general mandate, of up to 330,461,068 ordinary shares
  - Approved for the increase of registered capital from Baht 423,741,039 to Baht 655,358,932.25
  - Approved for the allocation of 1,852,943,146 new ordinary shares to prepare for the Company's obligations arising from the issuance of stock dividends, the warrants issued through private placement and to persons subscribing for debentures, and the adjustment to ESOP-W2 entitlements.
- In May 2015, the Company took the following actions related to ordinary shares:
  - Changed the par value of the ordinary shares from Baht 0.50 to Baht 0.125
  - Reduced the registered capital to Baht 423,741,039

- Increased the registered capital to Baht 655,358,932.25
- Issued 830,537,602 dividend stocks (4 existing shares to 1 new share) for operation results of 2014
- In July 2015:
  - Issued debentures through private placement within the limit of Baht 100 million, maturing in 2 years with a coupon rate of 4.68% per annum payable every 3 months.
  - Made private placement of additional 330 million ordinary shares at the offering price of Baht 2.20 per share to 16 persons and subsequently received Baht 713.09 million proceeds from selling.
  - Bought a 5-Rai plot of land in Map Kha District, Rayong to build a fabrication shop for storing, repairing and maintaining machines and to prepare for upcoming large-scale projects and business expansion.
- In November 2015, the Company won the SET Awards 2015 in 2 categories, namely Outstanding Corporate Performance Award for listed companies and Outstanding Investor Relations Award for listed companies.
- During 2015, the Company's additional investments in the ordinary shares of ASEAN Potash Chaiyaphum Public Company Limited (APOT) were transacted as follows:
  - In January 2015, TRC International Limited purchased additional 250,000 shares in APOT at Baht 200 per share, totaling Baht 50 million. As a result, TRC International Limited held a total of 750,000 shares in APOT.
  - On September 16, 2015, the 9/2015 Board of Directors' meeting passed a resolution to approve TRC Investment Limited (a subsidiary in Mauritius)'s purchase of up to 6.30 million shares in APOT at Baht 200 per share, or approximately Baht 1,260 million in total, from Thermal Trade and Investment Limited.
  - On October 15, 2015, TRC Investment Limited made 1<sup>st</sup> payment for APOT shares for a sum of Baht 355 million, and on October 30, 2015, the Company received the transfer of 1,775,000 shares in APOT.

As a result, TRC Group's shareholding in APOT at the end of 2015 went up to 12.25% (8.61% shareholding by TRC Investment Limited and 3.64% shareholding by TRC International Limited) with Baht 2,060.84 million in paid-up capital.

- The establishment of new subsidiaries and the registration of capital increase by Sahakarn Wisavakorn Co., Ltd. are as follows.
  - A subsidiary named "CR3 & Sahakarn Joint Venture Company Limited" ("CR3") was established in partnership between Sahakarn Wisavakorn and its Chinese strategic alliance, or China Railway No. 3 Engineering Group Co., Ltd., in which Sahakarn Wisavakorn holds 51% stake. The purpose of this subsidiary was to participate in the bidding for the State Railway of Thailand's project. Nonetheless, it did not participate in the bidding as planned and, as it was not intended to do further business, the management decided to dissolve the entity in order to save cost spent on its administration. The liquidation process was completed in December 2015.

- A subsidiary named “Hydrotek Sahakarn Joint Venture” (“CR3”) was established in partnership between Sahakarn Wisavakorn and Hydrotek Public Company Limited, in which Sahakarn Wisavakorn holds 49% stake. The purpose of this subsidiary was to take on the Provincial Waterworks Authority’s project for construction, improvement and expansion of waterworks operated under the administration of the Provincial Waterworks Authority, Koh Samui Branch in Surat Thani. It was agreed that all business operations of this joint venture would be under the sole responsibility of Sahakarn Wisavakorn and Hydrotek PLC would not share any gain or loss, nor would it take any responsibility in the damage arising from such operations.
- In May 2015, Sahakarn Wisavakorn increased its registered capital from Baht 200 million to Baht 500 million.
- Directors, executives, and employees had their warrants converted to ordinary shares in the 4<sup>th</sup> - 7<sup>th</sup> exercise of rights under ESOP-W2 program. The 3<sup>rd</sup> - 6<sup>th</sup> exercise of warrants led to an addition of 48,001,970 new shares (the conversion rate for the 3<sup>rd</sup> and 4<sup>th</sup> exercise was 1:1 while the conversion rate for the 5<sup>th</sup> and 6<sup>th</sup> was 1:5). The Company’s registered capital and paid-up capital as of the end of 2015 were Baht 655,358,932.25 and Baht 565,345,762 respectively.

#### In 2016

- In February 2016, the Company obtained the Letter of Award from APOT for Turnkey Delivery of APOT Project Package 2. Surface Processing and Facilities worth USD 142.03 million, EUR 416.00 million and Baht 12,433.39 million, or Baht 34,089.50 million in total. In May, the Company received a Notice to Proceed for the Early Works – the scope of work under this notice was restricted to the engineering work and site survey/exploration – worth altogether EUR 10.20 million and Baht 294.94 million, or Baht 711.36 million in total. This Notice to Proceed’s work is part of the Turnkey Delivery of APOT Project Package 2. Surface Processing and Facilities.
- In March 2016, the 3/2016 Board of Directors’ meeting passed a resolution approving the dissolution of subsidiaries in Sultanate of Oman – TRC Middle East LLC and TRC Engineering LLC – since both entities had not signed any project since 2015, nor did they have further plan to participate in bidding.
- In March 2016, the Company issued debentures through private placement within the limit of Baht 200 million, maturing in 2 years with a coupon rate of 4.40% per annum payable every 3 months.
- The 2016 Annual General Meeting of Shareholders passed its resolutions in relation to the Company’s registered capital as follows:
  - Approved for the issuance and private placement of up to 675 million warrants to persons subscribing for the Company’s debentures worth up to Baht 2,000 million.
  - Approved for the reduction of registered capital from Baht 655,358,932.25 to Baht 570,665,282.63.
  - Approved for the increase of registered capital from Baht 570,665,282.63 to Baht 726,373,442.88.

- Approved for the allocation of 1,245,665,282 new ordinary shares to prepare for the Company's obligations arising from the issuance of stock dividends, the warrants issued through private placement and to persons subscribing for debentures, and the adjustment to ESOP-W2 entitlements
- In May 2016, the Company executed transactions in connection with its ordinary shares as follows.
  - Reduced of registered capital to Baht 570,665,282.63
  - Increased of registered capital to Baht 726,373,442.88
  - Issued 570,436,077 dividend stocks (8 existing shares to 1 new share) for operations results 2015
- TRC Investment Limited made additional investments in ordinary shares of APOT. After the second, third, and fourth payments for these shares totaling Baht 905 million, a total of 2,750,000 APOT shares was transferred to TRC Investment Limited, making the TRC Group's stake in APOT as of the end of 2016 increased to 26.22 % (associated of the Company) TRC Investment Limited has 23.43% shareholding while TRC International Limited holds 2.79% of the APOT paid-up capital as of year-end 2016; amounting to Baht 2,688.31 million
- The Company's stocks were qualified to become part of the SET100 In the 2<sup>nd</sup> half of 2016 (the period starting from July 1 - December 31, 2016.)
- Directors, executives, and employees had their warrants converted to ordinary shares in the 8<sup>th</sup> and 9<sup>th</sup> (the last) exercise of rights under ESOP-W2 program. The number of additional shares resulting from the 7<sup>th</sup> to 9<sup>th</sup> exercise of warrants was 42,783,587 (the conversion rate was 1:5), consequently making the Company's registered capital and paid-up capital as of the end of 2016 stood at Baht 726,373,442.88 and Baht 641,998,220 respectively.

#### In 2017

- The Company and Sahakarn Wisavakorn Co., Ltd., secured 14 construction projects worth a total of Baht 5.36 billion. The following were the major projects:
  - o 4 projects awarded to the Company included:
    - EPC for RDCC Catalyst Cooler Project Part 2 – Back Pressure Steam and Utilities System awarded by IRPC Public Company Limited, worth Baht 492 million.
    - BV4.19 PIG Launcher and Receiver Installation Project awarded by PTT Public Company Limited, worth Baht 229.28 million
    - The Revamp LPG Transfer Pump to Domestic BRP Project awarded by PTT Public Company Limited, worth Baht 208.50 million
  - o 4 projects awarded to Sahakarn Wisavakorn Co., Ltd. included:
    - Improvement of Pracharuamjai Road – Mitmaitri Road Project awarded by the Bangkok Metropolitan Administration, the Metropolitan Electricity Authority, the Metropolitan Waterworks Authority, and TOT Public Company Limited, worth Baht 990.84 million.

- The 7,602-km Kanlapaphruek Road Extension Project awarded by the Department of Highways (Ministry of Transport), the Metropolitan Electricity Authority, and the Metropolitan Waterworks Authority, worth Baht 849.72 million
- The 2017 Annual General Meeting of Shareholders passed its resolutions in relation to the Company's registered capital as follows:
  - Approved for the reduction of registered capital from Baht 726,373,442.88 to Baht 641,998,220 consisting of 5,135,985,760 ordinary shares with par value of Baht 0.125
  - Approved for, first, the increase of registered capital for Baht 91,714,031.25 equivalent to 733,712,250 ordinary shares, resulting in the Company's registered capital increasing from Baht 641,998,220 to Baht 733,712,251.25 or equivalent to 5,869,698,010 ordinary shares
  - Approved for the allocation of 733,712,250 new ordinary shares to prepare for the Company's obligations arising from the issuance of stock dividends.
- In May 2017, the Company executed transactions in connection with its ordinary shares as follows.
  - Reduced of registered capital to Baht 641,998,220
  - Increased of registered capital to Baht 733,712,251.25
  - Issued 733,707,536 dividend stocks for dividend stocks (7 existing shares to 1 new share) for operation results of 2016

At the end of 2017, the Company has registered capital Baht 733,712,251.25 and paid-up capital Baht 733,711,662.00

- In June 2017, the Company set up a subsidiary named "TRC Utility Company Limited" with Baht 1,000,000 in registered capital, whose business activities mainly involve investment in projects related to basic infrastructure. The first investment by this newly-established entity was the Water Supply Concession Project of Tasit Subdistrict Administration Organization in Pluak Daeng District, Rayong. The investment value of this project was Baht 46.5 million. Completed projects will commercially commence business operations in March 2018
- In March 2017, the Company issued debentures through private placement within the limit of Baht 100 million, maturing in 1 year with a coupon rate of 4.50% per annum payable every 3 months
- In October 2017, the Company was certified ISO9001:2015 quality management standard, ISO14001:2015 environmental management system standard, and OHSAS18001:2007 occupational health and safety management system standard from SGS (Thailand) Company Limited.
- In November 2017, Sahakarn Wisavakorn Co., Ltd., in partnership with Chinese strategic alliance Huayuan Innovative Development (Hong Kong) Company Limited, set up a subsidiary named "SH Crossings Company Limited" in which Sahakarn Wisavakorn holds 51% stake and the other holds 49%. The purpose of this new subsidiary incorporated with Baht 40 million in registered capital was to do business in construction of underground electrical conduits, including boring and pipe jacking work,

- The Company's stocks became qualified for the calculation of sSET Index – an index representing price movements of common stocks of public companies, apart from constituents in the SET50 Index and SET100 Index, which listed on the Stock Exchange of Thailand, have constant liquidity and comply with requirements regarding the distribution of shares to minor shareholders. The Company was consistently included in the computation of the SET index in 2017 to 2018 and in the first half of 2019.
- The Company's operations result for 2017 received the "excellent" rating from the Thai Institute of Directors, up from "very good" rating. The Company also received the "excellent" rating in 2018; earning two consecutive years of "excellent" rating.
- During the year, ASEAN Potash Chaiphaphum Public Company Limited (APOT) – one of the Company's affiliates – has undertaken the following actions to make changes to its registered capital and paid-up capital.
  - In March 2017, APOT received Baht 80 million from the Ministry of Finance as payment for 1,174,860 newly-issued ordinary shares at the price of Baht 68.43 per share. After the registration of change in paid-up capital from Baht 2,688,308,700 to Baht 2,805,797,300, TRC Group's shareholding in APOT as of the end of 2017 was down to 25.13% (22.46% shareholding by TRC Investment Limited and 2.67% shareholding by TRC International Limited).
  - In July 2017, a change in capital from Baht 2,805,797,300 to Baht 29,472,035,900 was registered in accordance with APOT's 2017 Annual General Meeting of Shareholders' resolution approving the capital increase.

#### In 2018

- The Company and subsidiaries secured 10 construction projects worth a total of Baht 3.62 billion.
  - o TRC Group: 4 projects totaling Baht 924.88 million; major projects as follows:
    - Subcontracted work for the 5<sup>th</sup> Transmission Pipeline Project Phase 1 of PTT Plc, provided by Sinopec International Petroleum Service Corporation which was the main construction contractor of the project. The project involved engineering, procurement and construction; commissioning and start-up stations (Block Valve & Facility) at 14 locations, total project value of Baht 755.23 million for a period of 33 months
  - o Sahakarn Wisavakorn Co., Ltd.: 6 projects with total value of Baht 2.70 million. Major projects as follows:
    - Bridge construction project (over Ranong intersection), a clarifier pond, underground electrical cable work along Rama 3 road, bridge over Ranong intersection (a project of Bangkok Metropolitan Administration and the Metropolitan Electricity Authority); total project value of Baht 1.52 billion; project period 900 days.
    - Design and construction project for PTT Oil and Retail Business Plc's lubrication products distribution center; project value of Baht 600 million; project period 450 days



- In March 2018, the Company issued Baht 180 million in 2-year debentures (4.80% interest per annum payable every 3 months) to specific individuals.
- In April 2018, significant resolutions of the 2018 Annual General Meeting of Shareholders of pertaining to registered capital are as follows:
  - Approved the reduction of registered capital from Baht 733,712,251.25 to Baht 733,711,662; involving 5,869,698,010 common shares, at Baht 0.125 per share
  - Approved registered capital increase by Baht 36,685,58; involving 293,484,664 common shares; raising the registered capital of Baht 733,711,662 to Baht 770,397,245; involving 6,163,177,960 common shares
  - Approved addition of 6,163,177,960 capital-increase ordinary shares to support issuance of dividend stocks
- In May 2018, the Company proceedings with regards to ordinary shares were as follows:
  - Reduced registered capital to Baht 733,711,662
  - Raised registered capital to Baht 770,397,245
  - Issued 6,163,177,960 dividend stocks for operations result 2017 at ration of 20 existing share for 1 new share

As of 2018, The Company registered capital stood at Baht 770,397,245 while paid-up capital was at Baht 770,395,728.12

- In May 2018, APOT submitted a notice to the Company, requesting suspension of all construction activities that the Company had undertaken. APOT also requested to terminate the Refurbishment of the Existing Decline project
- Uncertainties relating to the current and future business operations of APOT which TRC Group has 25.13% shareholding, may result the Company in not getting the overdue interim payment for the portion of work completed from APOT, including the expected return on investment. Hence, the Company had to set up reserves for investment, trade receivable and other receivable, including realization of expenses / obligations / others, related to the construction project for APOT which is now a part of the project cost in the financial statements for 2018. This is considered a significant impact to the Company's operations results which contributed to the Company's inability to maintain the financial ratio that had projected for the debentures holders earlier. In March 2018, the Company proceeded to redeem the Baht 180 million debentures ahead of the maturity date. (Refer to details under "Operations Risks" within the "contract delay signing risk related to the Surface & Processing Plant and Facilities project" and "Management Discussion and Analysis")

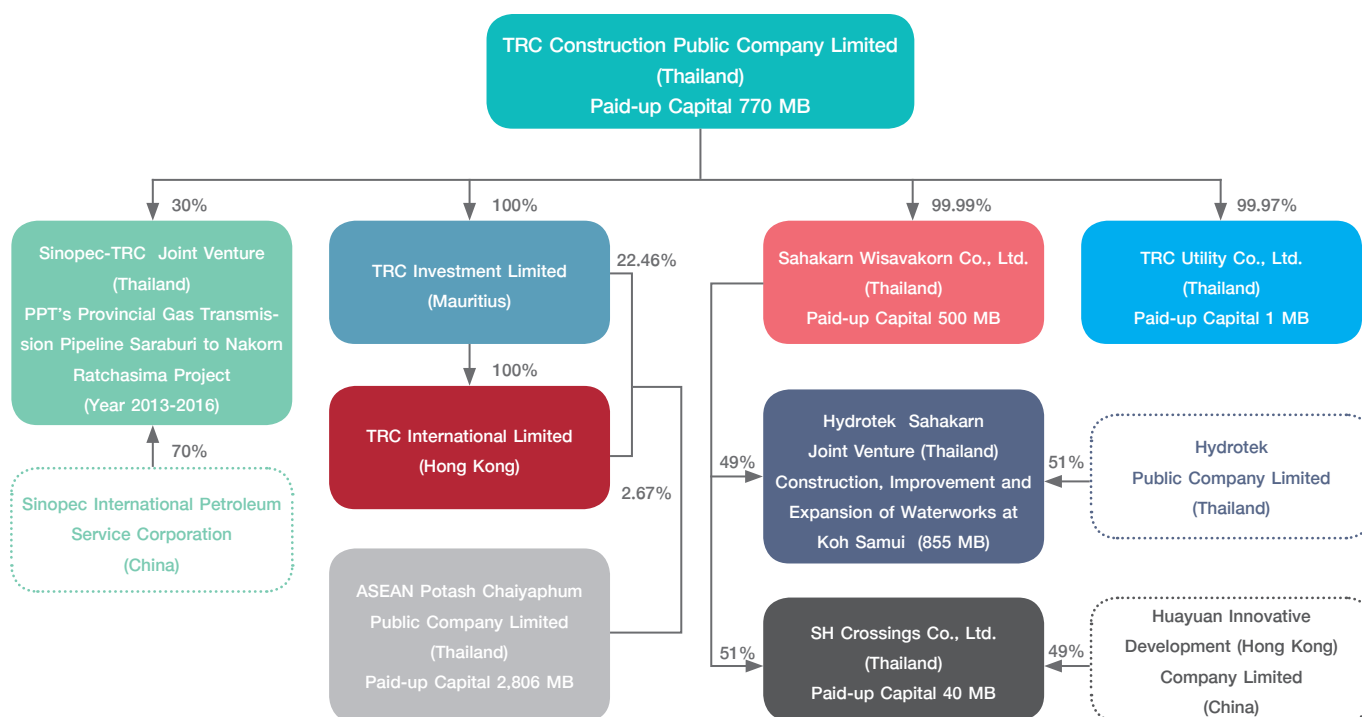
# 3. TRC Group Structure

## • TRC Group Structure Overview

As at 31 December 2018, There are 7 subsidiaries in which the Company's other subsidiaries own a stake. as follows;

1. Sahakarn Wisavakorn Company Limited
2. TRC Investment Limited
3. TRC International Limited
4. TRC Middle East LLC\*
5. TRC Engineering LLC\*
6. TRC Utility Company Limited
7. SH Crossings Company Limited

The picture shows the group structure of the company.



\* Since the business operations of the Company's subsidiary in Sultanate of Oman is in the process of being shut down and outstanding expense accounts being settled, the subsidiary was excluded from the Company and subsidiaries structure chart.

- **Relationships between TRC Group and Major Shareholder and Shareholding Structure of TRC Construction Public Company Limited**

Name	Paid-up Capital	Nature of Business	Shareholding (%)
TRC Construction Public Company Limited	Baht 734 million	To provide services in connection with engineering design, the supply of industrial machinery and equipment, and total-solution construction	-
<b>Subsidiaries:</b>			
Sahakarn Wisavakorn Company Limited	Baht 500 million	Public Utility and General Construction Service Business	99.99%
TRC Investment Limited	USD 1	Investment in other business	100%
TRC International Limited	HKD 10	Investment in other business	100% (Shareholding through TRC Investment Limited)
TRC Utility Company Limited	Baht 1 million	Investment in of basic infrastructure business	99.97%
TRC Middle East LLC	OMR 150,000	Construction Service Business in Sultanate of Oman	70% (Shareholding through TRC International Limited)
TRC Engineering LLC	OMR 150,000	Construction Service Business in Sultanate of Oman	70% (Shareholding through TRC International Limited)
SH Crossings Company Limited	Baht 40 million	Construction of Underground electrical conduits, trenchless for Horizontal Directional Drilling (HDD), Boring and Pipe Jacking	51% (Shareholding through Sahakarn Wisavakorn Company Limited)
Hydrotek Sahakarn Joint Venture	Baht 1 million	Construction, Improvement and Expansion of Waterworks, Koh Samui Branch, Koh Samui District, Surat Thani Province (This joint venture has been established to undertake this construction project only)	49% (Shareholding through Sahakarn Wisavakorn Company Limited)
<b>Associates:</b>			
ASEAN Potash Chaiyaphum Public Company Limited	Baht 2,806 million	Potash Mining for fertilizer and chemical production at Bamnet Narong District, Chaiyaphum Province	25.13% (holding through TRC International Limited 2.67% and TRC Investment Limited 22.46%)

# 4. Nature of Business

## The Revenue Structure of the Company and its subsidiaries

Revenue	Operated by	Percentage of Share Holding	2018		2017		2016	
			Amount (MB)	%	Amount (MB)	%	Amount (MB)	%
1. Construction Services income and Sales								
1.1 Revenue from Pipeline System Construction	TRC		924.94	40.14	861.67	35.37	1,240.08	33.18
	TRC-Sinopec Joint Venture	30%	-	-	1.40	0.06	132.98	3.56
	Hydrotek Sahakarn Joint Venture	49%*	82.87	3.60	211.62	8.69	423.35	11.33
Total			1,007.81	43.74	1,074.69	44.12	1,796.41	48.07
1.2 Revenue from Engineering System Installation and Factory Construction for Energy and Petrochemical Business	TRC		387.83	16.82	52.02	2.13	650.15	17.40
	SKW	99.99%	32.32	1.40	293.42	12.05	508.39	13.60
Total			420.15	18.22	345.44	14.18	1,158.54	31.00
1.3 Revenue from Civil Work Construction	TRC		16.42	0.71	298.17	12.24	272.63	7.30
	SKW	99.99%	812.26	35.25	651.83	26.76	469.72	12.57
Total			828.68	35.96	950.00	39.00	725.35	19.87
1.4 Revenue from Other Services	TRC Utility	99.97%	5.73	0.25	-	-	-	-
Total			5.73	0.25	-	-	-	-
Total construction services income			2,262.37	98.17	2,370.13	97.30	3,697.30	98.94
2. Interest income			0.84	0.04	1.34	0.05	3.20	0.09
3. Other income			41.31	1.79	64.36	2.64	36.40	0.97
Total revenues			2,304.52	100.00	2,435.83	100.00	3,736.90	100.00

\* Sahakarn Wisavakorn Co., Ltd. holds 49% in Hydrotek Sahakarn Joint Venture.

## 1. Nature of Business

### ● TRC Construction Public Company Limited

TRC Construction Public Company Limited is a construction company providing contracted integrated construction services to fit the clients' needs. This consists of design, engineering, sourcing of machinery, equipment and construction projects. The Company specializes in construction of pipeline system and construction of energy and petrochemical plants for both government and private sectors. In bidding for, and undertaking of projects, the Company serves the main contractor, subcontractor, or joint-venture partner, or a member of a consortium both locally and internationally, in accordance to the requirements of the clients.

Apart from the construction contracting business, the Company seeks opportunities in other businesses which offer sustainable growth potentials and relatively stable revenue. Heavy reliance on revenue from construction projects can be reduced by diversifying into project development and investment in related businesses with long-term growth potentials and acceptable return on investment, such as investment in ASEAN Potash Chaityaphum Public Company Ltd. to engage in potash mining and the establishment of TRC Utility Company Limited (a new subsidiary engaging in production and distribution of tap water for communities.)

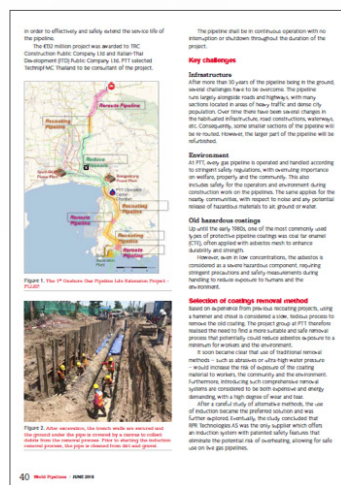
### Nature of Products and Services

#### 1. Construction Business

The Company provides various construction services as follows:

##### 1.1 Construction of pipeline system

The Company provides services relating to construction / installation of natural gas / petrochemical pipeline system, construction of natural gas pressure regulating / measurement stations. The Company has teams of engineers with experience and expertise to lay large natural gas pipeline (with maximum diameter of 30 inches), including laying of provincial natural gas pipeline. In 2015, PTT Public Company Limited awarded the Company and subsidiaries the 1<sup>st</sup> Transmission Pipeline Life Extension Project 28-inch Recoating Section (RC-400). The project involved the life extension of the natural gas pipeline system for the 1<sup>st</sup> transmission pipeline (28 - inch diameter in size) by removing the original pipe coating material and re-coating to extend the usage life of the pipes and avoid costly installation of new pipes. The Company's main clients are PTT Group and subsidiaries, such as PTT Plc, PTT Natural Gas Distribution Co., Ltd., IRPC Plc, PTT Global Chemical Plc, Global Power Synergy Plc, Gulf Energy Development Plc, Gulf JP UT Co., Ltd., and Siam Cement Group Plc's subsidiary, SCG Chemicals Co., Ltd.



Photographs of PTT's RC-400 project (undertaken by the Company) which appeared in the World Pipelines magazine

## 1.2 Construction of energy and petrochemical plants

The Company provides integrated construction services consisting of design, engineering, sourcing / installation of machinery / equipment for energy and petrochemical plants / companies, such as Bangchak Corporation Plc's subsidiary, Bangchak Biofuel Co. Ltd., PTT Plc's subsidiary namely PTT Oil and Retailing and Retail Business Plc, IRPC Plc, Trans Thai-Malaysia Co., Ltd.

## 2. Project Development Business as Investment

The Company seeks opportunities to generate sustainable growth and revenue in project development business such as industrial complex, basic infrastructure and public utilities projects following completion of construction projects for clients in the energy and petrochemical sectors. The Company's project development businesses as investments are as follows:

### 2.1 Project development as investment in basic public utilities business

The Company established a subsidiary - TRC Utility Co., Ltd. (which began commercial operations in March 2018) to produce and distribute tap water to communities in Tasit sub-district, Pluak Daeng district of Rayong province after the Company saw business opportunities in the government's policy to promote investment in basic infrastructure projects to draw local and foreign investors seeking to expand their production facilities to the Eastern Economic Corridor



zone. Creation of jobs and employment would lead to demand for supporting basic infrastructure and public utilities in the future.

## 2.2 Project development as investment in public sector concession business

The Company invested in a potash mining and processing plant project in Bamnet Narong municipality of Chaiyaphum province by acquiring a 25.13% equity share in ASEAN Potash Chaiyaphum Public Company Limited (APOT) through subsidiaries overseas. In February 2015, APOT obtained a 25-year underground mining concession from the Ministry of Industry. APOT's project aimed to produce 1.235 million tons/year of potash for primary potassium fertilizer which would reduce the import of 700,000 to 800,000 tons/year. The excess amount can also be exported and bring in the revenue.

### ● Sahakarn Wisavakorn Co., Ltd.

Sahakarn Wisavakorn Co., Ltd. ("Sahakarn Wisavakorn"), formerly known as United Engineering Co., Ltd., was established by Mr. Pratueng Kamprakob in 1954 with a registered capital of Baht 500,000 to provide construction service. Sahakarn Wisavakorn's business had been continually growing since its founding. However, in 1997 Sahakarn Wisavakorn started to have financial problem which went downhill over the years until it was so severe that Sahakarn Wisavakorn had to undergo the rehabilitation program in 2000. After years of its effort to recover financial position in accordance with the rehabilitation program, Sahakarn Wisavakorn was eventually released, by the order of the Central Bankruptcy Court, from the enforcement of rehabilitation program on March 1, 2004. In April 2007, Sahakarn Wisavakorn's shareholders traded shares with TRC which turned Sahakarn Wisavakorn into a subsidiary of the Company since the 2<sup>nd</sup> quarter of 2007.

Sahakarn Wisavakorn Co., Ltd. is a reputable construction contractor which received first-class ranking from many state organizations, such as Bangkok Metropolitan Administration, Bangkok Metropolitan Waterworks, Department of Water Resource and the Port Authority of Thailand. In May 2018, Saha Wisavakorn was selected by the Department of Highways to receive ranking upgrade from first-class to special class which allowed Sahakarn Wisavakorn to bid for every project of the Department of Highways without limit on project value.

Sahakarn Wisavakorn received quality management certification or ISO 9001:2008 since 2009. In 2018, the certification version was changed to ISO 9000:2015 which was on par with international standards.

Sahakarn Wisavakorn has experience and expertise in providing integrated construction services and civil works. Most projects involved infrastructure construction such as roads, bridges and buildings for state enterprises / agencies. Other projects consisted of construction of energy and petrochemical plants, as well as installation of machinery and equipment. The followings were some of the projects completed by Sahakarn Wisavakorn:

- In 2011, construction valued of Baht 2,134 million ethanol (from tapioca) production plant for Bio Ethanol Co., Ltd.
- In 2015, project valued of Baht 834.14 million involving sourcing, installing, testing of machinery / equipment system (M-01/2) for producing cigarettes and expanding tobacco for the Tobacco Authority of Thailand which under the supervision of the Ministry of Finance.



- In 2018, design and construction valued of Baht 600 million of a lubrication products distribution center for PTT Oil and Retail Business Plc.

Currently, Sahakarn Wisavakorn has a registered paid-up capital of Baht 500 million.

#### ● **TRC Utility Co., Ltd.**

In 2017, the Company set up a subsidiary named “TRC Utility Company Limited” with Baht 1,000,000 in registered capital, whose business activities mainly involve investment in projects related to basic infrastructure. The first investment by this newly-established entity was the Water Supply Concession Project of Tasit sub-district Administration Organization. The nature of this project involve the construction of water treatment plant and sale management of water to industrial and household users within the area governed by Tasit Sub-district Administration Organization in Pluak Daeng District, Rayong. TRC Utility Co., Ltd. commenced commercial operations in March 2018.

#### ● **SH Crossings Co., Ltd.**

In 2017, Sahakarn Wisavakorn Co., Ltd., in partnership with Chinese strategic alliance Huayuan Innovative Development (Hong Kong) Company Limited, set up a subsidiary named “SH Crossings Company Limited” with Baht 40 million in registered capital. The purpose of this new subsidiary is to do business in construction of underground electrical conduits, including boring and pipe jacking work. At present, SH Crossings Co., Ltd. receives subcontracting projects from Sahakarn Wisavakorn.

#### ● **Subsidiaries in Sultanate of Oman**

- **TRC Middle East LLC** was established for specific purpose in 2009 to undertake the Flow Lines Rima Satellites Small Fields Construction Project awarded by Petrogas Rima LLC. The nature of works was to construct the distribution pipeline for crude oil with the 3-year contract (May 2009 - April 2012) and, due to customer’s satisfaction, the contract was extended in 2012 for another 2 years for additional works. This project was completed and handed over to the customers since 2014.

- **TRC Engineering LLC** was established in 2011 for construction business in relation to energy business. In 2011, the Company was awarded by PTTEP (Oman) Co., Ltd. for the crude oil pipeline construction project with a milestone date set by the end of 2012

The Board of Director Meeting No. 3/2016 dated March 10, 2016 approved the dissolution of TRC Middle East LLC and TRC Engineering LLC. The dissolution of these companies was made based on the fact that TRC Middle East LLC had already finished the construction works and handed over the completed project to the owner, Petrogas Rima LLC, and both entities had not engaged in any other projects since 2015. At present both entities are in the process of officially registering the dissolution and liquidation which was anticipated to complete within 2018.

## **2. Marketing and Competition**

### **2.1 Marketing**

The Thai economic growth of 4.1% in 2017 was a slight increase over the 4.0% growth in 2016, but the highest in the past 6 years. Domestic spending and investment in the

private sector grew by 3.9%, up from 2.9% the year before. Investment in the public sector grew by 3.3%, an improvement over 2017. (Source: National Economic & Social Development Board (NESDB) news released on February 18, 2019). The continuing growth of the Thai construction sector this year should create more business opportunities for the Company and its subsidiaries (TRC Group) in the public sector, especially in civil construction works and basic infrastructure / public utilities projects. In 2018, the revenues of TRC Group were derived from gas pipeline related construction services (45%), construction of energy / petrochemical plants (18%) and various civil construction works (37%). With Baht 2,256 million in revenue from construction services, TRC Group ranked 13<sup>th</sup> in 2018 (12<sup>th</sup> in 2017) among the 20 companies listed under the construction services sector on the Thai Stock Exchange trading board.

To gain highest satisfaction from clients, the Company and Sahakarn Wisavakorn Co., Ltd. has implemented an evaluation system to measure the level of clients' satisfaction for each completed project undertaken. The Company and Sahakarn Wisavakorn will analyze the results obtained from the evaluation to correct deficiencies and make improvements accordingly. The evaluation results are a part of the key performance indicators for TRC Group in 2018. In general, the evaluation results showed satisfactory level of clients' satisfaction, averaging 3.88 points out of the maximum 5 points.

#### **A. Competitive strategies**

As part of competitive strategies, TRC Group believes in operating its business by making the most of cost-effective manner while maintaining productivity and operating efficiency. This can be accomplished through the development of employees' work skills both in terms of expertise and diversity, the use of technology to improve operating efficiency, productivity and operating costs, exchanging of ideas on work process / procedures with local / foreign business alliance and cooperation / joint-venture to gain competitive advantage over rivals. Furthermore, TRC Group also use Enterprise Resource Planning (ERP) system to improve cost efficiency and effectiveness of procurement, hiring, logistics, management of supplies / inventories since 2009. In 2018, TRC Group built a fabrication shop at Nikom Pattana district in Rayong province to expand construction service capacity and managed construction costs.

TRC Group's policy is to select civil works / projects which are in line with its vision, capabilities, diversity of services to fulfill clients' needs, and to establish strategic business alliance with local / foreign partners to enhance business edge and competitiveness.

#### **B Marketing strategies**

##### **● Products and services**

As for construction and pipeline related works in the energy and petrochemical sectors, the clients are mainly from the private sector. The projects are awarded via bidding process. TRC Group usually provide integrated design, engineering and machinery / equipment procurement services to the clients who tend to require specific design and specifications.

As for the private sector, most of the projects involve civil construction works and procurement of machinery / equipment. Projects are awarded via bidding process. TRC Group's policy is to deliver the completed projects which meets the clients' requirements and in compliance to the ISO9001:2015 international quality standards, OHSHA18001:2007 workplace safety standards

and ISO14001:2015 environmental standards, which TRC Group's operations have received the three types of ISO standards certifications since 2017.

#### ● Characteristics of clients and relationship between clients and TRC Group

In 2018, TRC Group's two main groups of clients were from the public (including state enterprises) and private sector. The public sector clients comprised of the Department of Highways, Department of Rural Roads, Royal Irrigation Department, State Railway of Thailand, Bangkok Metropolitan Administration, Bangkok Metropolitan Waterworks, Provincial Waterworks Authority, Metropolitan Electricity Authority and PTT Plc. This group of state organizations / agencies clients set prerequisites and terms of reference which potential contractors bidding for the projects must fulfilled before they can register to do business, such as good business reputation and credentials, past business records / accomplishments indicating experience and capabilities. As for securing projects from clients in the private sector, credentials, reputation in the industry, good references from other companies, past accomplishments were vital factors which helped pave way to secure business from private companies. Registration to serve as approved contractors was also required. Some of TRC Group's main clients in the private sector consisted of affiliated companies / subsidiaries of PTT Plc, Bangchak Corporation Plc and Eastern Water Resources Development and Management Plc.

TRC Group strives to improve and expand its capabilities to deliver quality project and services to the clients and to maintain good relationship with them. Furthermore, development of quality and capable human resource with technical expertise and marketing skills are necessary to respond and fulfill clients' needs. International quality standards certification such as ISO 9001:2015, workplace safety standards OHSHA 18001:2007 and environmental standards ISO14001:2015 which TRC Group provides added quality assurance for the clients. TRC Group continues to develop competent project development / construction teams and supporting teams to deliver quality projects which are in compliance with safety and environmental standards, laws and regulations within the specified time frame.

#### ● Distribution channels

The project construction business involves direct approach with potential clients by TRC Group's marketing and business development teams who seek to establish close relations with the target client groups. This would provide opportunities for TRC Group to learn about the clients' planned projects investment and to prepare for projects bidding. Hence, TRC Group requires its marketing and business development teams to prepare annual marketing and business development strategic plans to serve as management tools. It is also necessary to regularly follow news about the potential clients in order to know about their investment plans, or upcoming project bid invitations. TRC Group continues to expand its clients base in the public and private sector by becoming their approved contractors. In 2018, the Company and Sahakarn Wisavakorn Co., Ltd. registered as approved contractors with 26 projects (11 projects in public sector, 15 projects in private sector).

#### Competitive environment of the construction industry

Business in the Thai construction industry can be divided into 2 sectors – public sector and private sector. The proportion of the average investment value in the public and private sector is

53:47 respectively (source: Bank of Ayudhya Plc research article on the business and industry's outlook for 2018-2020). There are 2 groups of construction contractors: domestic and foreign. The domestic construction contractors comprise of large contractors (with annual revenue of over Baht 5,000 million), medium-size contractors (with annual revenue of Baht 1,000-5,000 million) and small contractors (with annual revenue of less than Baht 1,000 million).

The large and medium-sized construction contractors have the edge over small – sized contractors in bidding for large infrastructure projects in the public sector as they have vast experience, specific specialization / expertise, financial capacity and modern machinery / equipment and technology. Small contractors can still secure projects in the public sector, mostly as subcontractors. Most of the construction projects in the private sector were related to housing, industrial plants, commercial buildings, such as hotels and hospitals, etc. The volume of construction business in the private sector is related to the investment climate, or investors' confidence which is influenced by economic and political environment, investment activities in infrastructure projects and government's economic stimulus policy and incentives.

Currently, there are about 90,000 construction contracting companies in Thailand registered with the Department of Business Development of the Ministry of Commerce. The number of large construction contracting companies is considerably less than the number of medium-sized. Most of the construction contractors are small firm. At present, there are a total of 20 large and medium-sized construction contracting companies listed on the Thai Stock Exchange under the construction service sector. In 2018, the top 3 largest construction contracting firms are Italian -Thai Development Plc, CH. Karnchang Plc and Sino-Thai Engineering & Construction Plc. Collectively, these leading contractors account for 62% of the industry's total construction services revenue. (In 2018, the top 20 construction contractors generate a combined revenue of Baht 180,611 million from providing construction services).

In 2017-2018, competition was stiffer in the gas pipeline system business, especially the natural gas pipeline business after PTT Plc revised down its planned investment in oil and natural gas and the entry of several foreign rivals. TRC Group adapted to the situation by seeking other business opportunities to supplement heavy reliance of construction business, such as automated warehouse / storage system and underground electricity cable installation to compensate for some of the revenue drop from pipeline business. Some of the main business rival in the natural gas business are Italian-Thai Development Plc, Connell Dowell Constructors Thai Ltd., Qualitech Engineering & Construction Co., Ltd. and rivals from China, such as Sinopec International Petroleum Service Corporation and China Petroleum Pipeline Bureau.

Competition in the construction industry in 2018 was not intense, thanks to several mega infrastructure projects in the public sector, as well as small-to-medium sized projects which also stimulate investment in construction projects in the private sector. However, the shortage of skilled labor, oil price and rise in construction materials prices could hurt profits. Hence, TRC Group sought to establish good relationship with construction materials suppliers and subcontractors, business rivals in the industrial plants construction and civil works sectors, such as ItalThai Engineering Co., Ltd., GC Maintenance and Engineering Co., Ltd., CTCI (Thailand) Co., Ltd., Saipem S.p.A., Unique Engineering and Construction Plc and Sino-Thai Engineering and Construction Plc.

## Outlook of the Construction Industry and Competitive Environment

Investment in the construction industry is projected to grow by 7 - 9% on average in 2018 - 2020 driven by large infrastructure projects in the public sector and rising investment in construction projects in the private sector.

As for the outlook for 2019, the construction industry is expected to expand by 9 - 11% with investment value of about Baht 747 - 761 billion. In 2019-2020, the construction industry should continue to grow by 8 - 12%, driven by large basic infrastructure projects for the next 3 years. In addition, the annual budget of Baht 144.8 billion funding for small and medium sized projects, mostly related to expansion / upgrading to highways and rural roads will also contribute construction industry Growth.

Meanwhile, investment in construction projects in the private sector is expected to pick up in line with the domestic economy and large-scale basic infrastructure projects in the public sector. The growth and investment value of construction projects in the private sector are projected at 3 - 5% and Baht 542.0 - 552.5 billion respectively in 2018; and 4 - 7% a year in 2019 - 2020, driven by large basic infrastructure projects in the public sector. The Eastern Economic Corridor (EEC) development project should provide business opportunities for construction contractors in the next 3 years in view of the increase in building permits / Board of Investment (BOI) investment privilege applications issued for residential projects, office / commercial buildings, buildings, factories and hotels.

Operating results for construction contractors should improve, especially for contractors who focus on projects in the public sector. They should secure more state projects in 2019 - 2020 and enjoy increase in revenue. However, construction contractors' operations result may not grow as projected if the projects are delayed, or postponed, amid ongoing labor shortage and rising construction materials prices. As for construction contractors whose projects are mostly in the private sector, the business should pick up in line with increasing investment in the property sector amid conducive economic situation and robust investment in basic infrastructure projects in the public sector.

As for the business outlook for large, medium, and small sized construction contracting companies, the business for large contractors should continue to be good as they have advantage in terms of capital, diverse expertise, integrated services, modern machinery / equipment, technology, access to supplies, materials, and risk management system and cost efficiency through the utilization of advance technology. Meanwhile, small construction contractors have relatively limited room for growth due to uncertainty relating to the number of available projects and the share of the subcontract construction works allocated to them by the main contractors. The business environment for small construction contractors is very competitive due to the large number of small contractors. Since most of the construction works of small contractors involved low-skilled labor more than machinery, the number of pending projects in-hand are quite limited. This contributes to lack of financial liquidity during times of labor shortage.

The problem with the current labor shortage in the Thai construction sector may be more apparent in 2019 - 2020 with increase in construction activities in the public and private sectors. Competition for skilled labor will likely intensify, especially with the enforcement of the Foreign Labor Act 2017 as of the second half of 2018. If employers failed to register their foreign workers as required by law, the pool of foreign workers available to the Thai construction sector will shrink

in the next 3 years. In the past, foreign labour accounted for over 50% of the workers in the Thai construction sector; most of them unregistered workers with no work permits.

The construction material prices in the next 3 years should rise in line with the higher demand from increased in construction activities, especially the prices of concrete and steel. The new and stricter law - Government Procurement and Supplies Management Act revised Procurement Act BE 2560 (2017) may slow down construction activities in the public sector as the procurement process of the new procurement law is more intricate, and involves more state agencies; ranging from project feasibility, to price bidding and disbursement of interim payments.

The construction business in the CLM countries which comprise of Cambodia, Laos and Myanmar is projected to grow, especially for basic infrastructure projects. The proportion of construction expenses in relation to the gross domestic product (GDP) of Cambodia and Myanmar during 2011 - 2016 increased sharply, but contracted in Laos during 2015 - 2016 following the completion of the large hydro electric dam project. Meanwhile, the growth of the real estate sector in Laos is good, especially in the capital city. The growth of construction business in CLM countries is expected to be quite high in the next 3 years in line with the projected economic growth of 6.2 - 7.6% a year by the International Monetary Fund (IMF) in 2018 - 2020. The economic development of CLM countries still depend on investment in basic infrastructure projects and related facilities / amenities, especially in major cities and economic zones which are expanding in line with the conducive economy and vibrant tourism. Hence, this offers good opportunity for Thai construction contracting firms seeking to expand the market base due to the logistic advantage in transport of construction materials, equipment and supplies across the border.

- 1) Cambodia: investment in various projects, including real estate development along the newly developed land transportation routes are projected to take place.
- 2) The Laos People's Democratic Republic: increased investment in major transportation network in cooperation with foreign investors is promising, following large investment in electricity generation plants in the past. Reputable Thai construction contractors / home interior designers are in good position to get projects related to upscale residential construction and design projects in Laos.
- 3) Myanmar: the government is expected to continue investing in basic infrastructure projects, while the property sector shows signs of recovery, especially housing and commercial properties. Thai construction contractors should be able to expand their business in Myanmar.

Source: Research article on "Business / Industries Outlook 2018-2020" of the Bank of Ayudhya Plc

Based on the current situation, outlook and competitive environment of the construction sector, TRC Group has adjusted the business and competitive strategies for the next 3 years (2019-2021) and shift its vision from "in pursuit of excellence in design, and integrated construction services for the energy industry and public utilities system to support sustainable business growth" to "we strive to bring new innovations which will best meet the needs of local, CLMVT / Southeast Asian clients".



In December 2018, PTT Plc's Board of Directors approved the 5-year (2019-2023) investment plans worth Baht 167,114 million; details as follows:

							Unit : Million Baht
Business	2018	2019	2020	2021	2022	Total	%
Natural gas	3,920	3,786	2,543	203	456	10,908	7
Natural gas transmission pipeline	18,702	6,567	2,113	118	27	27,527	16
Downstream petroleum	4,395	2,653	2,553	2,175	3	11,779	7
Head office and others	6,384	4,402	2,063	1,927	919	15,695	9
Joint-investment and investment in PTT wholly-owned entities	37,100	28,773	14,526	12,761	8,045	101,205	61
<b>Total</b>	<b>70,501</b>	<b>46,181</b>	<b>23,798</b>	<b>17,184</b>	<b>9,450</b>	<b>167,114</b>	<b>100</b>

Based on PTT Plc's 5-year investment plan, the investment in natural gas accounts for 7% of PTT Plc's investment budget, investment in natural gas distribution / transmission pipeline at 16% of the investment budget. The investment will be related to the 5<sup>th</sup> natural gas transmission pipeline project, the natural gas pressure control station (Ratchaburi-Wang Noi #6) and the project pertaining to the extension of usage life of the natural gas transmission pipeline along the 1<sup>st</sup> route. All of these projects are expected to be completed by 2021; investment in downstream petroleum business will account for 7% of the investment budget, investment in head office and others (logistics, transportation of petroleum, petrochemical) will account for 9% of the investment budget, investment in PTT wholly-owned subsidiaries will account for 61% of the investment budget. Most of the investments will be related to business expansion and investment in PTT Oil and Retail Business Plc (PTTOR). TRC Group feels that PTT's expansion of business and investment in PTTOR (such as construction of petrol and LPG service stations and PTT lubricants products distribution center are opportunities for TRC Group to extend its services from the automated AS/RS goods storage system project it completed for PTT. In addition, PTT plans future investment (Provision) of Baht 187,616 million to expand its core business, such as LNG value chain and investment in PTT's new S-Curve businesses (under feasibility study stage) which will support technological changes, changing consumers' behavior, trend towards use of clean energy and Thailand's national strategic economic development plans.

### 3. Sourcing of products and services

#### ● Raw materials

Basic raw materials such as bricks, cement, steel, wires will be purchased locally after inspection of prices and quality from various reputable distributors / suppliers whose reputation will be checked / verified accordingly to TRC Group's procurement process and procedures. TRC Group has established criteria for selection of distributors / suppliers and conduct quality inspection on the selected distributors / suppliers to ensure the construction materials / supplies are in accordance to the specifications / types ordered, as well as details pertaining to submission of price lists, invoices, delivery time frames, etc. Suppliers have to adhere to the terms / conditions of TRC Group's procurement contracts.



As for special construction materials / parts / components which are not readily available locally, such as specific types of pipes, valves specified by the project designers / engineers, or project owners, TRC Group will have to import through authorized distributors, or directly from the manufacturers. In general, the project owners usually provide details of the required materials / supplies and a list of distributors acceptable to the project owners. With regards to procurement, TRC Group stresses the importance of quality and suitability of the materials / supplies to the project to be undertaken, as well as the before / after service provided by the distributors / manufacturers. TRC Group will conduct price negotiation in accordance to TRC Group's procurement procedures with the selected distributors / manufacturers following the selection process. The selected distributors / manufacturers will submit their price lists before TRC Group issue its purchase order to the selected distributor / manufacturer. Following the purchase and delivery of goods process, TRC Group will regularly monitor the quality of the materials / supplies to ensure the quality is consistent and acceptable, as well as the after-sales service of the distributors / manufacturer. TRC Group will keep records of distributors / suppliers in the database as reference for future procurements and selection of distributors / manufacturers.

- **Machinery and equipment**

As for machinery / equipment, TRC Group has some machinery / equipment in stock to support general construction works, and will lease some machinery / equipment which are needed for specific tasks / projects which TRC Group may not have on hand. Furthermore, Sahakarn Wisavakorn has machinery / equipment to support civil construction works, such as trucks, excavators, tractors which can be borrowed by affiliated companies to reduce operations costs and expenses on machinery / equipment.

- **Subcontract**

In hiring subcontractors, TRC Group will consider the potential subcontractor's reputation, experience, past work records, capabilities, financial capacity, manpower, and equipment / machinery to see if it would match the assigned project tasks. TRC Group has policies, terms and conditions for hiring subcontractors similar to the project contract (back-to-back) which TRC Group established with clients, such as details pertaining to delivery of completed work, warranty on quality of the completed works, inspection and delivery procedures / process, and fine for breach of agreed terms/ conditions.

#### 4. Pending construction project work value (not delivered)

As of December 31, 2018, the Company and Sahakarn Wisavakorn Co., Ltd. have pending / work-in-progress construction projects which have yet to be delivered as follows:

	Number of projects	Pending project work value (Million Baht)
TRC Construction Plc	8	1,145.95
Sahakarn Wisavakorn Co., Ltd.	9	3,849.05
<b>Total</b>	<b>17</b>	<b>4,995.00</b>

- TRC Construction Plc

Project Name	Name of employer	Project value of TRC Group (Mil. Baht)	Approx. remaining project work value (Mil. Baht)	% of pending project work value, not delivered	Expected year of completion
1. 1 <sup>st</sup> Transmission Pipeline Life Extension Project: 28" Recoating Section	PTT Plc	3,237.76	213.37	6.59	2019
2. The Fifth Transmission Pipeline Project Phase 1 (5TP1)	Project Contractor: Sinopec International Petroleum Service Corporation	755.23	676.91	89.63	2020
3. RDCC Catalyst Cooler Project Part 2 Back Pressure Steam Turbine and Utilities System	IRPC Plc	492.00	195.57	39.75	2019
4. BV4.19 PIG Launcher and Receiver Installation Project	PTT Plc	229.28	4.01	1.75	2019
5. Revamp LPG Transfer Pump to Domestic BRP	PTT Plc	208.50	1.71	0.82	2019
6. BCM Naphtha and Pygas Pipeline (Option 1 RTC Area)	SCG Chemicals Co., Ltd.	80.04	10.24	12.80	2019
7. BCM Naphtha and Pygas Pipeline (Option 2 Interconnecting Pipeline)	SCG Chemicals Co., Ltd.	74.76	29.29	39.17	2019
8. Natural gas distribution pipeline project (to PTT NGV station P.N. Petroleum	PTT Plc	14.85	14.85	100.00	2562
<b>Total of 8 projects in-hand</b>		<b>5,092.42</b>	<b>1,145.95</b>		

- Sahakarn Wisavakorn Co., Ltd.

Project Name	Name of employer	Project value of TRC Group (Mil. Baht)	Approx. remaining project value (Mil. Baht)	% of pending project work value, not delivered	Expected year of completion
1. Bridge construction project (across Na Ranong intersection)	Bangkok	1,257.08	1,244.51	99.00	2021
	Metropolitan Electricity Authority	267.29	267.29	100.00	2021
2. Design, construction of a lubrication products distribution center	PTT Oil & Retail Business Plc	600.00	600.00	100.00	2020
3. Project to expand width of Kalapapruek Road	Department of Rural Roads	445.16	305.54	68.64	2020
	Metropolitan Electricity Authority	361.85	361.85	100.00	2020
	Metropolitan Waterworks	42.71	21.21	49.67	2020
4. Road upgrade project (Pracha Ruam Jai Rd.- Mitr Maitree Rd.)	Bangkok	367.29	274.15	74.64	2019
	Metropolitan Electricity Authority	418.79	227.82	54.40	2019
	Metropolitan waterworks	208.50	112.26	53.85	2019
	TOT Plc	9.53	5.84	61.30	2019
5. Highway No. 4 Ta Kua Pa District, - Thai Muang District, Phang Nga province	Construction Office Route 1, Department of Highways	347.38	258.97	74.55	2019
6. Project to upgrade road to National Park Office (Hat Khanom Mu Koh Thale Tai)	Nakorn Sri Thammarat	98.11	5.36	5.46	2019
7. Project to upgrade Samwa Road	Bangkok	171.54	146.24	85.25	2019
8. Piling & structure project for FN Outlet	FN Factory Outlet Plc	35.64	0.25	0.70	2019
9. Project to upgrade safety at large intersection at Lam Kaen Tap Lamu	Department of Highways (Phuket Highways District)	17.76	17.76	100.00	2019
Total of 9 projects in-hand		4,648.63	3,849.05		

# 5. Risk Factors

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## 1. Risks Related to Business Operation

### 1.1 Risk specific to the Company's nature of business and ability to secure new contracts

In June 2018, PTT Plc (major oil and gas company)'s board of directors reviewed and revised down the investment plans for 2018, from Baht 246.61 billion to Baht 221.29 billion. Most of the reduction involved investment in oil and natural gas pipeline businesses. This led to a decline in revenue earned from pipeline related contracts for TRC Group, especially the lower income from laying of natural gas pipeline (which accounted for 49, 45 and 45% of revenue earned from construction service contracts in 2016-2018). TRC Group still adheres to the lump sum price construction service contracts and / or fixed price contract which exposed TRC Group to risk the actual operations cost rise above the planned / budget costs. Furthermore, there is risk associated with obtaining of new construction / service contracts, as such contracts have to go through auction, or bidding process which may sometimes be postponed for variety of reasons, not to mention the stiff price competition from numerous rivals. In changing business environment, TRC Group cope with such risks by managing operating costs effectively, developing employees' work skills and seeking new business opportunities with good potentials to gain competitive business edge, such as smart warehouse business which is part of intra-logistics business which offers very high growth potential. In today's fast-growing digital / online business environment, consumers are turning to automated warehouse system to reduce potential errors relating to goods deliveries.

In 2018, Sahakan Engineer Co., Ltd. (TRC's subsidiary) and Auto Motion Works Co., Ltd. (a specialist in design, manufacturing and installation of intra-logistics and automated storage / retrieval system (AS/RS) together won the bid and secured a Baht 600 million contract from PTT Oil and Retail Business Plc (PTTOR) to design and construct an automated distribution hub for PTTOR's lubrication products. This project should pave way for TRC Group to secure more contracts outside TRC Groups core businesses related to natural gas pipeline and infrastructure construction.

Most of contracts secured by Sahakan Engineer Co., Ltd. were infrastructure projects for state agencies. In the past 3 years, Sahakan Engineer Co., Ltd.'s revenue rose from Baht 236 million in 2015 to 845 million in 2018. The growth is likely to continue as the state has a larger investment budget, as evident by the bidding of larger projects such as the high speed train for Bangkok – Nakorn Ratchasima and for connecting the 3 major airports, the basic infrastructure works for the Eastern Economic Corridor (EEC) and repair works for building structures and roads for area damaged by natural disaster. Hence, business growth related to construction projects in the state sector is likely to continue. This has prompted Sahakan Engineer Co., Ltd. to pursue and bid for more projects in the public sector, such as high speed train, moving of power line cables to underground. In December 2018, Sahakan Engineer Co., Ltd. won the Baht 2.20 billion contract (signed in February 2019) from the Metropolitan Electricity Authority to move power line cables underground for Ratchada-Asoke route.

The Company and subsidiaries (TRC group) operate business according to the policy of providing excellent services to the satisfaction of the clients within the specified time frame. TRC

Group strives to maintain its clients base, both in the state and private sector in order to gain clients' confidence. Furthermore, TRC Group's policy is to keep searching for various investment project which can generate steady income in the long term in order to reduce future income stream risk.

## **1.2 Risk from intense price competition in bidding**

In 2018, price competition in projects bidding remains very high, The cutthroat competition in the bidding for construction projects has been continuing into 2018. A domestic construction industry is one of many other businesses whose players, big-name and small, rival one another largely on price. In a typical bidding process, it usually starts with the preliminary screening of qualified bidders who are required to meet all qualifications as set by the project owner and then, out of all these qualified bidders, the owner will select the one offering the lowest price. And this is the challenge that the Company is currently up against, especially when it comes to projects of grand scale which usually attract both domestic contractors and offshore conglomerates with deeper pockets and higher operational capacity than the Company. Realizing that a failure to continually bring in new projects may take its toll on the Company's percentage of market share and operating performance, the Company at times has to resort to lowering its gross profit margin or offering a project owner more appealing contractual terms and conditions. To be better positioned to compete, the Company and Sahakarn Wisavakorn Company Limited continue to scour the globe for suitable offshore contractor with a large pool of capital and technological know-how to form a business tie before participating in the bidding particularly for the private sector's large-scale energy and petrochemical projects and those of the government including the construction for transportation and public utility infrastructure while new innovations business, such as AS/RS mentioned in 1.1 offer high growth potential and fewer business rivals. Meanwhile, the Company is also working on its policy to strengthen its long-running relationship with the existing clients in both state and private sectors in order to create better opportunity to continually secure projects in the future, such effort encompassing activities to ensure the improved quality standard, timely delivery of work, and better skills, quality and efficiency of workforce.

## **1.3 Workforce management risk**

The Company's core business of contracting construction generally needs workforce with specialized expertise and knowledge and the loss or shortage of qualified workforce will adversely affect the Company's ability to efficiently conduct business as well as its competitiveness in the market. Construction contracts business relating to natural gas pipeline declined in the past 3 years due to higher competition and entry of new rivals and uncertainties of project bidding which is subject to postponement, timing and luck. In 2018, TRC Group sought new business opportunities which required hiring of new personnel, developing of appropriate skills and expertise, and recruiting specialists to help move the new business forward. Obviously, this means higher human resource related expenses for TRC Group. In its attempt to minimize risk related to permanent and contract workforce, the Company has resorted to devising a meticulous HR scheme based on the volume of backlog and incoming projects, and varying the number of active subcontractors to best match the timing.

Having made human asset a priority, the Company has scrupulously designed and launched HR management policy taking into consideration commensurate and fair packages of allowance and fringe benefits as well as staff morale and spirit. The Company also provides other support in terms of training, both in-house and outsourced programs, to hone employees' skills and empower them with knowledge necessary for their varied jobs and efficiency enhancement. In addition, there has been continual revisions of workflow process and related systems to keep them operable at all times, and reinforced environment where staff, though working in different departments, is active in sharing their knowledge with others which is a good opportunity for co-workers to have better understanding or skills that they have not been familiar with before. Establishment of a knowledge tank via the TRC Group's intranet system allows employees to conveniently search for needed information by themselves.

#### **1.4 Compliance risk from changes in government policies, laws, rules and regulations**

The Company is principally engaged in the provision of large-scale construction services for the energy and petrochemical industries and its overall potential for growth largely depends on the national policies and economic direction which is a significant driving force behind a private sector's investment decisions, as well as a series of national development programs e.g. projects and schemes related to the development of transportation infrastructure and promotion of real estate sector. Unfortunately, sometimes the magnitude of economic growth and government spending may not hit the projected figures. Various state construction projects hinge on the country's budget allocation, economic growth, investment and political climate. To mitigate some of those risks and to reduce heavy dependent on construction contracts business income, the Company seeks new businesses and business alliances for long-term investment, such as the establishment of 2 subsidiaries in 2017 namely TRC Utility Co., (Thailand) to produce and distribute tap water, and SH Crossings Co., Ltd. to secured contracts related to laying of power line cables underground. The Company also linked up with Auto Motion Works Co., Ltd. to secure contracts, such as AS/RS. The Company's 3-year (2019-2021) investment plan targets return on investment of at least 15%

In addition, the Company has the obligation to comply with specific sets of law and regulatory requirements e.g. laws governing labor protection, environmental impact, and safety, the Public Limited Company Act, rules and regulations, including official announcements of the Stock Exchange of Thailand as well as the Securities and Exchange Commission, and so forth. At present, the trend of legal oversight in the construction industry is toward stringent laws and regulations. In response to this trend, the Company manages potential legal risk by setting up a department/division specifically in direct command of handling legal risk, upgrading corporate standards commensurate with all legal requirements, and taking all possible actions to ensure that all activities performed in the name of the Company are in full compliance with relevant laws, rules and regulations.

## **2. Operational Risks**

### **2.1 Contract signing delay risk (Surface & Processing Plant and Facilities Project)**

Turnkey Delivery of ASEAN Potash Chaiyaphum Plc. Package 2. Surface Processing Plant and Facilities is a Baht 34 billion construction contract project to build potash processing plant which the Company received a Letter of Award for this project from APOT since February 10, 2016.

During 2016-2017, APOT assigned some early works which could be undertaken by the Company while APOT tried to secure capital source and arrange for project financing. However, in the past 3 years uncertainties delayed the APOT project from the original plan. In 2018, APOT sent a written notice requesting the Company to temporary stop the project construction activities. By year-end 2017, the Company has yet to receive any confirmation from APOT with regards to capital and project financing. Hence, the signing of the construction contract for the project could not take place. For accounting purpose, the Company recorded the TRC Group's investment in APOT's ordinary shares as a depreciation and as doubtful debt for the various current assets remaining balance related to APOT construction project, as well as record the expenses / obligations / other responsibilities which are part of project cost. This contributed to a significant loss of Baht 2.04 billion for 2018 operations results. However, if APOT can eventually secure the required capital and project financing, the Company is likely to be awarded the outstanding payments due for the completed work / service and the APOT construction project contract signing can then take place accordingly. The Company can then remove the excess amount of loss reserve in its accounting records and recognize future profit to compensate the loss for allocating the reserve which was established in 2018.

## 2.2 Management and project delay risks

The Company is aware of the potential management risk and has established guidelines to mitigate the potential risk by adopting the ISO9001: 2015 quality management standards to maintain consistent quality operations standards at the head office and at various project sites. In addition, the Company also established human resource development program to enhance employees' work skills and knowledge, integrity, responsibility to the organization, including all vested parties in order to reduce the potential risk.

With respect to the construction projects, the Company generally enters into a lump-sum type of contract with clients, under which the fixed contract price is acknowledged by both contracting parties as early as the date of contract execution. This means the Company will achieve profitability as or better than planned depends on its ability to manage project costs against the budget. Any delay in the construction of project will undoubtedly incur incremental costs to the project, adversely affecting the Company's operating results and professional reputation.

Causes of delayed progress of construction may include:

1. The Company or its subcontractor failing to make the construction/project progress as planned;
2. Specific circumstances which may happen along the way and/or any change in surrounding circumstances; and
3. Changes in terms and conditions by the employer/project owner while the construction is underway.

This would lead to higher expense e.g. labor cost, utility expense, the employer/project owner may claim a compensation or damages from the Company. To mitigate this set of risks, the Company has launched a policy to ensure:- the preparation of scrupulous action plan, a clear delegation of tasks and responsibilities, key operations being closely monitored and followed up, ongoing coordination and communication with project owner and relevant authorities so that the construction could proceed and finish as earlier scheduled by both parties.



On the part of subcontractors, the Company has enlisted only firms that have adequate experience, good credentials in quality of work and timing delivery. However, as a measure to counter any damage from delay that may be caused by subcontractors, the Company's common practice is to require each subcontractor to provide a performance bond to the Company. For any event where it is not possible to identify who is at fault for the delay e.g. accident, natural disaster, etc, the Company has resorted to the insurance policies taken out for each project against the possible perils.

### **2.3 Risk related to supply of construction materials**

The Company has both domestic and overseas sources of suppliers. Procurement and delivery of some items of construction materials is subject to long lead time. Delay in material delivery will be a direct threat to the project accomplishment. To mitigate such risk, the Company makes a separate list of materials that require long lead time to ensure the purchase of all items in the list are made timely in advance to avoid any delays. Before joining any bidding on construction project, the Company will gather the information on key items of materials from vendors/suppliers or seek from the selected suppliers their commitment by signing a memorandum of cooperation on exclusive supply to ensure, at the earliest, the availability of such items in the intended quantity. Other measures taken to minimize the risk related to the supply of materials include:- negotiating the price with vendors/suppliers in advance for better bid planning such that the tender price proposal is profitably proportionate to cost estimates; and determining the estimate contingency at the earliest step of tender in order to mitigate the risk arising from the volatility of material prices and/or changes in currency exchange rates.

Furthermore, it is important for the Company to make sure that payments to vendors/suppliers are strictly within the negotiated credit term. Mindful of the fact that vendors' trust and confidence in the Company entails the reliability and punctuality of shipment/delivery of orders, the Company is committed to doing business with suppliers in a straightforward and trustworthy manner.

## **3. Financial Risks**

### **3.1 Risk arising from default in payment and/or delay in interim payments**

The Company's main revenue is from provision of construction works services which is susceptible to clients failing to make payments, or not paying interim payments within the due dates that oftentimes the collection of due payment depends on the progress of construction work on each project. This type of risk certainly affects the liquidity and working capitals of the contractors. Fortunately, most of the Company's clients are either large companies with good reputation and strong financial basis or governmental agencies, thus curbing the overall risk in this category to an acceptable level. Hence, the Company has to be cautious and selective with clients to minimize such risk exposure. In case of new clients, the Company will do in-depth research into their historical information i.e. business background, type of business, names of their management, and financial statements. In some cases, negotiation with certain clients for advance payment before the commencement of the construction might be necessary. With respect to the state-enterprise and government agency clients, the risk of default in payment is minimal, yet there is a risk of late payment due to the complications inherent in bureaucracy. However, in 2018, the Company did not receive interim payment from ASEAN Potash Chaiphum Plc. as mentioned in 2.1, this was

recorded as doubtful trade receivable and account receivable, unrealized income and construction contract performance bond receivable, totaling Baht 366 million

### 3.2 Risk arising from terms and conditions of debenture

The Company must maintain the interest bearing debt to equity ratio of not exceeding 2 : 1 as of the end of the accounting period of each year for the entire duration of the debenture period and the interest coverage ratio : EBITDA/interest expenses of not less than 4 times in accordance to the terms of the shareholder's debentures rights. In any case, the main reason for establishing the accounting reserve for investment in APOT shares and acceptance of APOT's project as shown in the financial statements for 2018, resulted in the Company inability to maintain the required interest coverage ratio. However, the Company has rectified this problem to avoid negative impact on confidence in the Company, business opportunities and capital-raising ability in the future. In February 2019, the Company issued a notice to inform all debentures holders that the Company would like to redeem of Baht 180 million worth of debentures on March 29, 2019, ahead of the March 2020 maturity date.

### 3.3 Foreign currency exchange risk

As certain portions of the Company's and its subsidiaries' revenue and project costs are in foreign currencies, the Company and its subsidiaries are inevitably exposed to foreign currency exchange risk; any change in the pertinent exchange rates will have impact on the Company's costs and operating results. The Company has managed such risk by estimating costs of to-be-imported equipment/materials prior to entering the tender based on the exchange rates set higher than the rates applicable at the time of cost assessment in order to buffer the adverse effects of the potential fluctuation in exchange rates. For any large-scale project which usually requires the import of expensive materials and equipment, the Company may discuss with the project owner to allow a certain portion of the contract price to be quoted in the same foreign currency as the price of imported materials/equipment so that the Company would be able to manage the foreign currency risk by matching flows of income and expenses of the same currency through the use of foreign currency deposit (FCD) account(s) to which the income received in foreign currency from the project owner would be deposited while the amount due to the imported items' supplier would be withdrawn from this account as well. Other instruments used in mitigating foreign exchange risk include the forward contract and the FX Link.

In 2018, Sahakarn Wisavakorn Company Limited delivered a project which was paid in Baht and foreign currency. The project involved sourcing, installation and testing cigarettes producing machinery / equipment system for a tobacco factory. The Company also paid a deposit for APOT's project machinery in foreign currency.

### 3.4 Risk arising from insufficient working capital

Construction contractors need to have considerably high level of working capital to procure construction materials, related supplies, pay labor cost and other expenses. The Company will receive payment after the contracted phase of the construction project is completed and delivered to the client. The pending project could be affected if the client is late in making payment, or if the Company's working capital could not temporarily cover for shortfall in cash. Furthermore, the Company has considerable number of infrastructure and utilities projects with the state where problem with late payments is normal. In order to reduce working capital inadequacy risk, the

Company has to established strict payment terms / conditions and advance payment requirement with the client from the initial stage. The Company must also plan and match the cash inflow and outflow for each project properly to maintain good financial liquidity. Furthermore, the Company must establish close relationship with financial institutions which can provide project financing and working capital loans. The Company also issued debentures in 2016 - 2018 to support TRC Group's business expansion and investment projects. The Company uses monthly cash flow projection to effectively manage monthly working capital needs and to ensure adequate financial liquidity to support business operations.

### **3.5 Risk arising from financial assistance to the intra-group companies**

There have been business reasons necessitating the Company to give some of its subsidiaries financial support in the form of the provision of guarantee on loan or the authorization for using the Company's existing credit line. This somehow poses a threat to the Company particularly in case where the borrowing subsidiary becomes troubled with liquidity problem, usually after persistent loss of, or underperformed, profit, to the extent that repayment of loan is no longer possible and the Company, in the capacity of a guarantee provider, has to assume its subsidiary's repayment obligations. To minimize this type of risk, the approval authority and procedures for authorizing financial assistance to subsidiaries are clearly prescribed.

## **4. Risk affecting the rights or investments of securities holders**

### **Risk of having a major shareholder with above 25 percent of controlling interest**

As of December 31, 2018, KPK 1999 Company Limited held 1,743,941,131 shares of the Company, accounting for 28.30% of the company's paid-up shares (50.50% of KPK 1999 Co., Ltd.'s shares owned by Mrs. Paichit Rattananon, Chairman of the Company's Board of Directors). This situation presents the risk that, whenever the number of shareholders attending any meeting of shareholders accounts for less than half of all shares issued, KPK 1999 Co., Ltd. may be able to dominate the resolution of the meeting for the agenda that requires a majority of votes, though the matters which the law or the Company's Articles of Association specifically require not less than three-fourths of attending shareholders' votes in resolving are unlikely to be affected by KPK 1999's current shareholding percentage in the Company. In such circumstance, other minor shareholders may not be able to conduct check-and-balance on the matters proposed by the major shareholder, or KPK 1999, if they fail to gather sufficient number of opposing votes.

Having recognized the importance of a well-functioning check-and-balance mechanism, the Company has taken actions to ensure the following: power, roles and responsibilities of all committees being clearly and transparently defined; connected transactions between directors, major shareholders, executives, authorized persons, including any person with potential conflict of interest being strictly governed by a specific corporate policy whereas all of these persons are not allowed to vote on any agenda involving this particular matter; at least one independent member of the Audit Committee being appointed to sit on the Board of Directors to convince shareholders that this person will be able to transparently perform duties of probing and screening matters before proposing to the meeting of shareholders for approval, as well as performing check-and-balance functions, to a certain degree, on behalf of all minor shareholders.

## 6. General Information

<b>Name</b>	:	<b>TRC Construction Public Company Limited</b>
<b>Nature of Business</b>	:	Engages in Pipeline System Construction, Engineering System Installation and Factory Construction in Energy and Petrochemical Businesses and Project Development and Investment Business
<b>Head Office Address</b>	:	No. 8, Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0107548000293
<b>Website</b>	:	www.trc-con.com
<b>Telephone</b>	:	+66 2022 7777
<b>Facsimile</b>	:	+66 2022 7788
<b>Registered Capital</b>	:	Baht 770,397,245.00
<b>Paid-up Capital</b>	:	Baht 770,395,728.12
<b>Number of Issued Ordinary Shares</b>	:	6,163,165,825 shares
<b>Par Value</b>	:	Baht 0.125

### References

<b>Share Registrar</b>	:	<b>Thailand Securities Depository Company Limited</b>
<b>Address</b>	:	No. 93, The Stock Exchange of Thailand Building, Ratchadaphisek Road, Dindaeng, Dindaeng, Bangkok 10400, Thailand
<b>Telephone</b>	:	+66 2009 9000
<b>Facsimile</b>	:	+66 2009 9991
<b>Auditor</b>	:	<b>EY Office Limited</b>
<b>Address</b>	:	Lake Ratchada Complex, 33rd Floor, 193/136-137 Ratchadaphisek Road, Bangkok 10110, Thailand
<b>Telephone</b>	:	+66 2264 0777, +66 2661 9190
<b>Facsimile</b>	:	+66 2264 0789-90, +66 2661 9192
<b>Debenture Registrar</b>	:	<b>CIMB Thai Bank Public Company Limited</b>
		Capital Financial Markets and Payments Operations Department Registrar and Payments Operations Unit 15 <sup>th</sup> Floor
<b>Address</b>	:	44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330
<b>Telephone</b>	:	+66 2626 7506, +66 2626 7511

## Companies in which TRC holds at least 10% stakes

### ● Subsidiaries

<b>Name</b>	:	<b>Sahakarn Wisavakorn Co., Ltd. (“SKW”)</b>
<b>Portion of Share Holding</b>	:	99.99%
<b>Nature of business</b>	:	Public Utility and General Construction Service Business
<b>Head Office Address</b>	:	No. 8, Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0105497000257
<b>Website</b>	:	www.sahakarn.com
<b>Telephone</b>	:	+66 2022 7777
<b>Facsimile</b>	:	+66 2022 7788
<b>Registered Capital</b>	:	Baht 500,000,000
<b>Paid-up Capital</b>	:	Baht 500,000,000
<b>Number of Issued Ordinary shares</b>	:	50,000,000 shares
<b>Par Value</b>	:	Baht 10

<b>Name</b>	:	<b>TRC Investment Limited</b>
<b>Portion of Share Holding</b>	:	100%
<b>Nature of business</b>	:	Investment in other project
<b>Head Office Address</b>	:	10 <sup>th</sup> Floor, Standard Chartered Tower, 19 Cybercity, Ebene, Mauritius
<b>Registration Number</b>	:	079207 C1/GBL
<b>Registered Capital</b>	:	USD 1
<b>Paid-up Capital</b>	:	USD 1
<b>Number of Issued Ordinary Shares</b>	:	1 share
<b>Par Value</b>	:	USD 1

<b>Name</b>	:	<b>TRC International Limited</b>
<b>Portion of Share Holding</b>	:	100% (Shareholding through TRC Investment Limited)
<b>Nature of business</b>	:	Investment in other project
<b>Head Office Address</b>	:	Room 2101, Hong Kong Trade Centre 161-7 Des Voeux Road, Central Hong Kong
<b>Registration Number</b>	:	1202588
<b>Registered Capital</b>	:	HKD 10,000
<b>Paid-up Capital</b>	:	HKD 10
<b>Number of Issued Ordinary Shares</b>	:	1 share
<b>Par Value</b>	:	HKD 10

<b>Name</b>	:	<b>TRC Middle East LLC</b>
<b>Portion of Share Holding</b>	:	70% (Shareholding through TRC International Limited)
<b>Nature of business</b>	:	Construction Service Business in Sultanate of Oman
<b>Head Office Address</b>	:	Office No. 41, Fourth Floor, Ghoubra Plaza, Building No. 19, Plot No. 105, Muscat, Sultanate of Oman, P.O.Box 659, Mina Al-Fahal, Muscat P. Code 116
<b>Registration Number</b>	:	1070009
<b>Registered Capital</b>	:	Oman Rial 150,000
<b>Paid-up Capital</b>	:	Oman Rial 150,000
<b>Number of Issued Ordinary Shares</b>	:	150,000 shares
<b>Par Value</b>	:	Oman Rial 1
<b>Name</b>	:	<b>TRC Engineering LLC</b>
<b>Portion of Share Holding</b>	:	70% (Shareholding through TRC International Limited)
<b>Nature of business</b>	:	Construction Service Business in Sultanate of Oman
<b>Head Office Address</b>	:	Office No. 41, Fourth Floor, Ghoubra Plaza, Building No. 19, Plot No. 105, Muscat, Sultanate of Oman, P.O.Box 659, Mina Al-Fahal, Muscat P. Code 116
<b>Registration Number</b>	:	1108601
<b>Registered Capital</b>	:	Oman Rial 250,000
<b>Paid-up Capital</b>	:	Oman Rial 250,000
<b>Number of Issued Ordinary Shares</b>	:	250,000 shares
<b>Par Value</b>	:	Oman Rial 1
<b>Name</b>	:	<b>TRC Utility Company Limited</b>
<b>Portion of Share Holding</b>	:	100%
<b>Nature of business</b>	:	Production and distribution tap water
<b>Head Office Address</b>	:	No. 8, Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0105560100101
<b>Registered Capital</b>	:	Baht 1,000,000
<b>Paid-up Capital</b>	:	Baht 250,000
<b>Number of Issued Ordinary Shares</b>	:	10,000 shares
<b>Par Value</b>	:	Baht 100
<b>Name</b>	:	<b>SH Crossings Company Limited</b>
<b>Portion of Share Holding</b>	:	51% (Shareholding through Sahakarn Wisavakorn Company Limited)
<b>Nature of business</b>	:	Construction of Underground electrical conduits, trenchless for Horizontal Directional Drilling (HDD), Boring and Pipe Jacking
<b>Head Office Address</b>	:	No. 8, Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0105560194041
<b>Registered Capital</b>	:	Baht 40,000,000
<b>Paid-up Capital</b>	:	Baht 40,000,000
<b>Number of Issued Ordinary Shares</b>	:	400,000 shares
<b>Par Value</b>	:	Baht 100

● Associate

<b>Name</b>	:	<b>Sinopec-TRC Joint Venture</b>
<b>Portion of Share Holding</b>	:	30% (Sinopec International Petroleum Service Corporation 70%)
<b>Nature of business</b>	:	Construction Service transmission pipeline from Saraburi to Nakhon Ratchasima
<b>Head Office Address</b>	:	No. 8 Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0993000315361
<b>Telephone</b>	:	+66 2022 7761

<b>Name</b>	:	<b>Hydrotek Sahakarn Joint Venture</b>
<b>Portion of Share Holding</b>	:	TRC 49% (Hydrotek Public Company Limited 51%)
<b>Nature of business</b>	:	Construction, Improvement and Expansion of Waterworks, Koh Samui Branch, Koh Samui District, Surat Thani Province (This joint venture was established solely for the purpose of running this construction project.)
<b>Head Office Address</b>	:	No. 1, TP&T Tower 14 <sup>th</sup> floor, Soi Vibhavadi Rangsit 19, Chatuchak District, Bangkok 10900
<b>Registration Number</b>	:	0993000342674
<b>Telephone</b>	:	+66 2936 1661-2

● Others

<b>Name</b>	:	<b>ASEAN Potash Chaiphum Public Company Limited</b>
<b>Portion of Share Holding</b>	:	25.13% consist of; 22.46% (shareholding through TRC Investment Limited, Mauritius) 2.67% (shareholding through TRC International Limited, Hong Kong)
<b>Nature of business</b>	:	Potash mining for fertilizer and chemical production at Bamnet Narong District, Chaiphum Province
<b>Head Office Address</b>	:	No. 8, TRC Building 5 <sup>th</sup> floor, Soi Sukhaphiban 5 Soi 32, Tha Raeng, Bang Khen District, Bangkok 10220, Thailand
<b>Registration Number</b>	:	0107547000478
<b>Telephone</b>	:	+66 2001 7733
<b>Facsimile</b>	:	+66 2001 7739
<b>Registered Capital</b>	:	Baht 29,472,035,900
<b>Paid-up Capital</b>	:	Baht 2,805,797,300
<b>Number of Issued Ordinary Shares</b>	:	28,057,973 shares
<b>Par Value</b>	:	Baht 100



# 7. Shareholding Structure and Management

## Major Shareholders

The top 10 largest shareholders as of December 31, 2018 were as below:

Name	No. of Shares	Shareholding
1. Mrs. Paichit Rattananon's Group	1,766,385,830	28.66%
- Mrs. Paichit Rattananon	22,444,699	0.36%
- KPK 1999 Co., Ltd. <sup>(1)</sup>	1,743,941,131	28.30%
2. SMPR Holding Pte. Ltd. <sup>(2)</sup>	348,434,992	5.65%
3. Thai NVDR Company Limited	218,371,748	3.54%
4. Mr. Sangchai Wasunthara	201,734,370	3.27%
5. Mr. Anonchai Weeraprawat	180,000,000	2.92%
6. Mr. Boontham Kraiwattanapong	85,124,999	1.38%
7. Mr. Smai Leesakul	67,905,961	1.10%
8. THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED, SINGAPORE BRANCH	59,156,567	0.96%
9. NOMURA PB NOMINEES LTD.	47,199,799	0.77%
10. Mr. Sarun Prakairungthong	43,648,500	0.71%
11. Others	3,145,203,059	51.03%
<b>Total Issued and Paid-up Shares</b>	<b>6,163,165,825</b>	<b>100.00%</b>

Note:

1. KPK 1999 Co., Ltd. is the company of which 50.50% shares are held by Mrs. Paichit Rattananon, Chairman.
2. The Ultimate Shareholder of SMPR Holding Pte. Ltd. is SP International Group Limited (shareholding in Samlee 100%)

## 8. The Dividend Policy

The Company has a policy to pay dividends approximately 40% of its net profit after tax and legal reserve. However, the dividend payout may be changed subject to future investment plans, and any other actions that deem necessary and appropriate under the condition that those actions must be taken for the best interests of shareholders such as the provision for loan repayment, funding for business expansion, or in the case of any adverse change of marketing situation that may affect the Company's future cash flow. The Board of Directors is authorized to consider the dividend payment, however, the resolution of dividend payment must be further proposed for approval of Shareholders' Meeting except for the case of interim dividend payment as the Board of Directors has the authority to approve prior to informing the interim payment to the subsequent Shareholders' Meeting.

Details of the dividend payments during the past three years of TRC Construction Public Company Limited are as follows

	2017	2016	2015
Net profit margin	Baht 101.91 million	Baht 357.93 million	Baht 399.13 million
Net profit attributable to equity holders of the Company and its subsidiaries	Baht 92.79 million	Baht 290.76 million	Baht 305.96 million
Annual statutory reserve	Baht 0.73 million	Baht 16.10 million	Baht 15.40 million
Net profit of the Company after statutory reserve	Baht 101.18 million	Baht 341.83 million	Baht 383.73 million
Dividend Type	Stock dividend and Cash dividend	Stock dividend and Cash dividend	Stock dividend and Cash dividend
The number of shares entitled to receive dividend payment	5,869,693,296 shares	5,135,985,760 shares	4,563,502,886 shares
Dividend payment	Cash dividend of Baht 11.74 million (Baht 0.0020000 per share) Stock dividend of Baht 36.69 million (Baht 0.00625 per share) with existing 20 shares per 1 share	Cash dividend of Baht 20.54 million (Baht 0.0040000 per share) Stock dividend of Baht 91.71 million (Baht 0.0178571 per share) with existing 7 shares per 1 share	Cash dividend of Baht 45.64 million (Baht 0.010000 per share) Stock dividend of Baht 71.30 million (Baht 0.015625 per share) with existing 8 shares per 1 share
Ratio of dividend payment to net profit after statutory reserve	47.86%	30.01%	30.48%

Note: The cash/stock dividends were based on the par value at Baht 0.125 per share

For subsidiaries, the dividend payment policy is not explicitly stated.

# 9. Management Structure

## 1. The Board of Directors

### Composition of the Company's Board of Directors

The Board of Directors consists of knowledgeable, competent members whose qualifications fully meet the requirements as per Section 68 of the Public Company Limited Act B.E. 2535 (1992) and the relevant notifications of the Capital Market Supervisory Board. The Board of Directors plays an important role in determining the Company's policies, overseeing, monitoring and assessing the Company's operating performance, independently evaluating performance of the Company's top management, and working with top management in developing both short and long term operational plans, corporate vision, mission, and management targets.

As at December 31, 2018, the Board of Directors and the subcommittees are listed below;

Namelist of Board of Directors, Managements and Advisor		Directors	Subcommittees					
			Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Management Committee	Executive Committee	Management Committee
1. Mrs. Paichit Rattananon*	Chairman	☑						
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.	Independent Director and Chairman of Audit Committee	✓	☑	✓		✓		
3. Mr. Arun Chirachavala	Independent Director, Chairman of Corporate Governance Committee and Chairman of Risk Management Committee	✓	✓	✓	☑	☑		
4. Mrs. Puangthip Silpasart	Independent Director	✓	✓	✓				
5. Assoc. Prof. Pises Sethsathira	Independent Director and Chairman of Remuneration and Nomination Committee	✓		☑	✓			
6. Mr. Smai Leesakul	Director and Chairman of Executive Committee	✓					☑	
7. Mr. Pasit Leesakul	Director, Chief Executive Officer and Chairman of Management Committee	✓		✓		✓	✓	☑
8. Mrs. Podchanee Phaosavasdi	Director and Chief Commercial Officer	✓		✓	✓	✓	✓	✓
9. Ms. Pavita Leesakul	Director and Vice President, Corporate Affairs Division	✓			✓			✓
10. Mr. Loh Eng Kee	Chief Operating Officer						✓	✓

Namelist of Board of Directors, Managements and Advisor			Directors	Subcommittees					
				Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Management Committee	Executive Committee	Management Committee
11. Mr. Chaveng	Reesrikitti	Deputy Chief Operating Officer							✓
12. Mr. Wison	Akethummakul	Assistant Vice President, Engineering Division							✓
13. Mr. Amnuay	Laimai	Quality Management Division Advisor**							✓
14. Mr. Nithitat	Tip-anuntasakul	Material Management & Logistics Advisor**							✓
15. Mr. Supachoke	Liamkaeo	Corporate Strategic Departure Advisor							✓
Total			9	3	6	4	4	4	9

☑ Chairman ✓ Committee

\* Chairman is a representative from KPK 1999 Co., Ltd., the Major Shareholders

\*\* Retired on December 31, 2018

Authorized Directors consist of Mrs. Paichit Rattananon, Mr. Smai Leesakul, Mr. Pasit Leesakul and Mrs. Podchanee Phaosavasdi. Two of four directors sign together with the Company's seal.

Ms. Ounruen Sujaritttham, Senior Finance and Investor Relations Manager, as the Company Secretary

● The Board of Directors of Sahakarn Wisavakorn Company Limited consists of 6 members as follows:

Name-List of Board of Directors			Directors	Authorized Directors*
1. Mrs. Paichit Rattananon	Chairman		☑	◎
2. Mr. Smai Leesakul	Director		✓	◎
3. Mr. Pasit Leesakul	Director		✓	◎
4. Mrs. Podchanee Phaosavasdi	Director		✓	◎
5. Mr. Sakda Tantiwattanakul	Director		✓	
6. Mr. Chaveng Reesrikitti	Director		✓	
Total			6	4

☑ Chairman ✓ Committee ◎ Authorized Directors

\* Two of four directors sign together with the Company's seal.

- The Board of Directors of TRC Utility Company Limited consists of 3 members as follows:

Name-List of Board of Directors	Directors	Authorized Directors*
1. Mr. Pasit Leesakul Chairman	☑	◎
2. Mrs. Podchanee Phaosavasdi Director	✓	◎
3. Ms. Pavita Leesakul Director	✓	◎
<b>Total</b>	<b>3</b>	<b>3</b>

☑ Chairman ✓ Committee ◎ Authorized Directors

\*Two directors sign together with the Company's seal.

- The Board of Directors of SH Crossings Company Limited consists of 3 members as follows:

Name-List of Board of Directors	Directors	Authorized Directors*
1. Mr. Pasit Leesakul Chairman	☑	◎
2. Mrs. Podchanee Phaosavasdi Director	✓	◎
3. Mr. Cong Chen Director	✓	◎
<b>Total</b>	<b>3</b>	<b>3</b>

☑ Chairman ✓ Committee ◎ Authorized Directors

\*Two directors sign together with the Company's seal.

- Summary of directors attendance in 2018 Board of Directors Meeting

Namelist of Board of Directors	Attendances in 2018 (time)							
	Shareholders Meeting	Directors	Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Management Committee	Executive Committee	Management Committee
1. Mrs. Paichit Rattananon	1/1	6/7	Not a member	Not a member	Not a member	Not a member	Not a member	Not a member
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.	1/1	7/7	4/4	3/3	Not a member	2/2	Not a member	Not a member
3. Mr. Arun Chirachavala	1/1	7/7	4/4	3/3	1/1	2/2	Not a member	Not a member
4. Mrs. Puangthip Silpasart	1/1	7/7	4/4	3/3	Not a member	Not a member	Not a member	Not a member
5. Assoc. Prof. Pises Sethsathira	1/1	7/7	Not a member	3/3	1/1	Not a member	Not a member	Not a member
6. Mr. Smai Leesakul	1/1	6/7	Not a member	Not a member	Not a member	Not a member	1/1	Not a member
7. Mr. Pasit Leesakul	1/1	7/7	Not a member	3/3	Not a member	2/2	1/1	2/2

Namelist of Board of Directors	Attendances in 2018 (time)							
	Shareholders Meeting	Directors	Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Management Committee	Executive Committee	Management Committee
8. Mrs. Podchanee Phaosavasdi	1/1	7/7	Not a member	3/3	1/1	2/2	1/1	2/2
9.1 Mr. Loh Eng Kee (Resigned on August 1, 2018)	1/1	5/5	Not a member	Not a member	Not a member	Not a member	1/1	1/2
9.2 Ms. Pavita Leesakul*	-	1/1	Not a member	Not a member	*	Not a member	Not a member	2/2

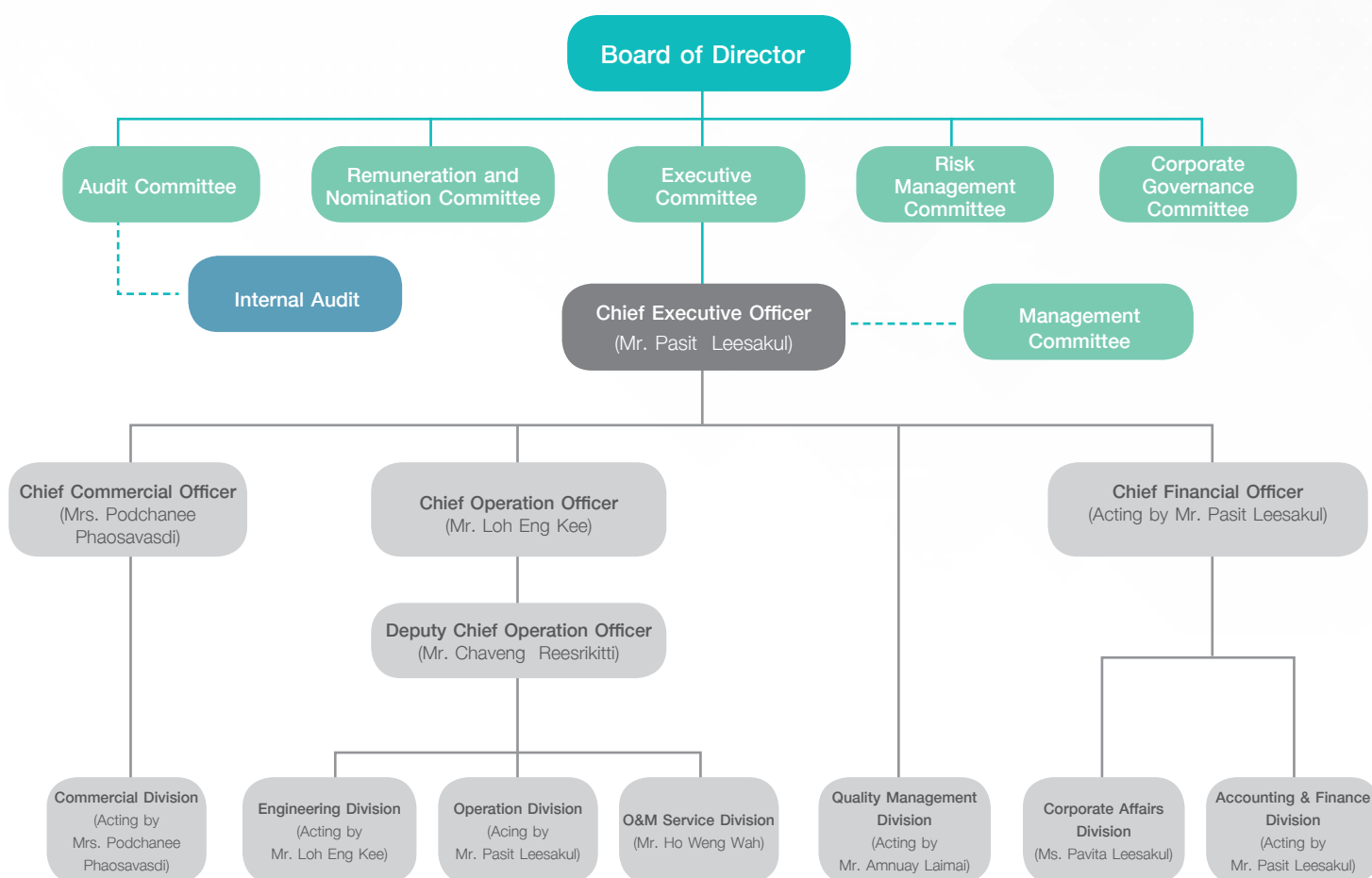
#### ● Summary of Director Appointment

Name	Appointed Year	Latest Appointment	Type of Directorship	Nomination/ Appointment in 2017	Next Appointment
1. Mrs. Paichit Rattananon	2005	2016	Chairman of the Boards	No	2019
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.	2005	2018	Independent Director	Yes	2021
3. Mr. Arun Chirachavala	2009	2016	Independent Director	No	2019
4. Mrs. Puangthip Silpasart	2016	2017	Independent Director	No	2020
5. Assoc. Prof. Pises Sethsathira	2005	2018	Independent Director	Yes	2021
6. Mr. Smai Leesakul	2007	2017	Executive Director	No	2020
7. Mr. Pasit Leesakul	2013	2017	Executive Director	No	2020
8. Mrs. Podchanee Phaosavasdi	2007	2018	Executive Director	Yes	2021
9. Ms. Pavita Leesakul*	2018	*	Executive Director	No	2019

\* Ms. Pavita Leesakul was appointed as Authorized Director in place of Mr. Loh Eng Kee on August 8, 2018 and was appointed as the Authorized Corporate Governance Director on November 12, 2018.

## 2. Executives

The Company's Organization Chart as of December 31, 2018



As of December 31, 2018, the Company management consists of 7 members as follows:

- |                               |  |
|-------------------------------|--|
| 1. Mr. Pasit Leesakul         | Chief Executive Officer and<br>Acting Chief Financial Officer          |
| 2. Mrs. Podchanee Phaosavasdi | Chief Commercial Officer   |
| 3. Mr. Loh Eng Kee            | Chief Engineering Division   |
| 4. Mr. Chaveng Reesrikitti    | Deputy Chief Operating Officer   |
| 5. Ms. Pavita Leesakul        | Vice President, Corporate Affairs Division                             |
| 6. Ms. Ounruen Sujarittham    | Senior Finance and Investor Relations Manager<br>and Company Secretary |
| 7. Ms. Rewadee Ardham         | Senior Accounting Manager  |



### Scope of duties and responsibilities of Chief Executive Officer

1. To support and facilitate the Board's work, report to the Board and bridge between the Board and Company staff
2. To set work management system for production, service and delivery such as marketing, bidding, design and procurement
3. To take responsibility in financial, tax, risk and facility management of the company and propose annual budget for Board approval and prudently manages organization's resources within those budget guidelines according to current laws and regulations
4. To effectively manage the human resources according to authorized personnel policies and procedures that fully conforms to current laws and regulations.
5. To manage the community and public relations by assuring that the organization and its mission, programs, products and services are consistently presented in strong, positive image to relevant stakeholders.
6. To oversee fundraising planning and implementation, including identifying resource requirements, researching funding sources, establishing strategies to approach funders, submitting proposals and administrating fundraising records and documentation
7. To perform any other duties as delegated by the Board of Directors.

Chief Executive Officer shall be directed by and report to the Board of Directors. He will also consume the position of Chairman of the Management Committee.

The Chief Executive Officer does not have the authority to undertake any of the Company's or its subsidiary's issues that might create conflict of interest for the Chief Executive Officer or other stakeholders (according to the Company's regulations stipulated by the Office of the Securities and Exchange Commission or the Stock Exchange of Thailand).

### 3. Company Secretary

The Board of Directors has appointed Miss Ounruen Sujarittam as the Company Secretary since November 8, 2007.

Education:	Master Degree of Administration - Finance, NIDA Bachelor Degree of Faculty of Commerce and Accountancy - Accountancy, Chulalongkorn University
Working Experiences:	as shown on "The Board of Directors and Managements"

### Scope of duties and responsibilities of Company Secretary

1. Prepare and file documents related to
  - Director Registration
  - Notice of the Board of Directors Meeting including committees for which she acts as secretary to those committees; Remuneration and Nomination Committee and Corporate Governance Committee

- Minutes of Meetings of the Board of Directors and those committees' meetings
- Notice and Minutes of Shareholder Meetings

2. Keep record of conflict of interest report and independent certification letters of directors and executives and propose copies to Chairman of the Boards and Chairman of the Audit Committee within 7 days after receipt of such reports.

3. Handle any actions required per the regulation of the Office of the Securities and Exchange Commission and as assigned by the Company such as

- Give advice related to relevant laws and regulations including the code of conduct of corporate governance practice so that any activities of the Board of Directors are undertaken in compliance with those relevant laws.
- Handle the Board of Directors Meetings, Remuneration and Nomination Committee Meetings and Corporate Governance Committee Meetings
- Act as contact person for completed information disclosure as required by relevant laws to the Securities and Exchange Commission and Stock Exchange of Thailand
- Carry out any tasks as assigned by the Company

#### 4. Directors and Management's Remunerations

##### ● Cash Remuneration

##### (A) Directors' Remuneration in 2018

In 2018, the directors' remuneration can be summarized as follows:

1. Monthly remuneration: Baht 50,000 per month for Chairman of the Boards, Baht 25,000 per month for Chairman of the Audit Committee, Baht 20,000 per month for each independent director and Baht 10,000 per month each for 4 Executive Directors.

2. Special remuneration or bonus: the 2018 Annual General Meeting of Shareholders resolved the director remuneration for 2017 operating result to 5 independent directors, totally Baht 930,000 to following directors;

- |  |              |
|--|--------------|
| - Mrs. Paichit Rattananon, Chairman                    | Baht 330,000 |
| - Baht 150,000 each for 4 independent directors        |              |
| 1. Assoc. Prof. Aekkachai Nittayagasetwat, PH.D., FRM. | Baht 150,000 |
| 2. Mr. Arun Chirachavala                               | Baht 150,000 |
| 3. Assoc. Prof. Pises Sethsathira                      | Baht 150,000 |
| 4. Mrs. Puangthip Silpasart                            | Baht 150,000 |

3. Meeting Fee: Baht 10,000 per person per meeting for the Audit Committee, Remuneration and Nomination Committee, Corporate Governance Committee, Risk Management Committee (for independent director only).

For subsidiaries, in 2018, the director remuneration was arranged and paid for Sahakarn Wisavakorn Co., Ltd. only and in form of monthly remuneration at the rate of Baht 10,000 per person.

The summary of the directors' remuneration (2018) as follows:

(Unit: Baht)

Name-Surname	TRC Director Remuneration					Sahakorn Wisavakorn's Director Remuneration	Total of Remuneration (TRC and SKW)
	Board of Directors (Total of 2018 monthly Remuneration and 2017 Bonus)	Meeting Fee					
		Audit Committee	Remuneration and Nomination Committee	Corporate Governance Committee	Risk Management Committee		
1. Mrs. Paichit Rattananon	930,000	None	None	None	None	120,000	1,050,000
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.	450,000	40,000	30,000	None	20,000	None	540,000
3. Mr. Arun Chirachavala	390,000	40,000	30,000	10,000	20,000	None	490,000
4. Mrs. Puangthip Silpasart	390,000	40,000	30,000	None	None	None	460,000
5. Assoc. Prof. Pises Sethsathira	390,000	None	30,000	10,000	None	None	430,000
6. Mr. Smai Leesakul	120,000	None	None	None	None	120,000	240,000
7. Mr. Pasit Leesakul	120,000	None	None	None	None	120,000	240,000
8. Mrs. Podchanee Phaosavasdi	120,000	None	None	None	None	120,000	240,000
9. Ms. Pavita Leesakul	47,742	None	None	None	None	None	47,742
10. Mr. Loh Eng Kee	70,000	None	None	None	None	None	70,000
Total remuneration for TRC directors amounted to Baht 3,327,742	3,027,742	120,000	120,000	20,000	40,000		
11. Mr. Sakda Tantivatthanakul	Not a Director of TRC					120,000	120,000
12. Mr. Chaveng Reesrikitti	Not a Director of TRC					120,000	120,000
Total remuneration for SKW directors						720,000	
	Grand Total of TRC and SKW directors remuneration						4,047,742

## (B) TRC Management's Remuneration

Remuneration	2017		2018	
	Persons	Amount (MB)	Persons	Amount (MB)
Salary	7	31.97	6	26.84
Bonus	7	6.92 (2016 bonus)	6	1.39 (2017 bonus)
<b>Totally</b>		<b>38.89</b>		<b>28.23</b>

- Note:
1. There are 6 managements consists of Mr. Smai Leesakul, Mr. Pasit Leesakul, Mrs. Podchanee Phaosavasdi, Mr. Loh Eng Kee, Mr. Chaveng Reesrikitti and Ms. Pavita Leesakul
  2. The management's remuneration consists of salary, bonus, life & group accident insurance, health insurance, commencing year group social security funds and counterpart for provident funds but excluded Accounting Manager's and Finance Manager's remuneration.

## (C) Remuneration of Chief Executive Officer

The Remuneration and Nomination Committee is responsible for evaluating work performance and determining the remuneration of Chief Executive Officer before proposing it to the Board of Directors for approval.

The remuneration of Chief Executive Officer includes salary, bonus, social security contribution, provident fund contribution, health insurance, a company car with driver, and fuel allowance.

### • Other Remunerations

#### (A) Other remuneration of directors

The Chairman of the Boards receives the social security funds and counterpart for provident funds (total of Baht 64,725 in 2018) life & group accident insurance, health insurance, car, driver and fuel.

#### (B) Other remuneration of independent directors

The independent directors receive the health insurance

#### (C) Other remuneration of executive officer

##### Provident fund contribution

Allowance	2017		2018	
	Persons	Amount (MB)	Persons	Amount (MB)
Provident Fund	5	1.45	4	0.84

- Note:
- 4 managements consists of Mr. Smai Leesakul, Mr. Pasit Leesakul, Mrs. Podchanee Phaosavasdi and Ms. Pavita Leesakul

## 5. Employees

As of December 31, 2018, the Company and Sahakarn Wisavakorn Co., Ltd. had the total number of 1,345 staffs consisting of 411 permanent and 934 temporary as follows:

Division	Number of employees	
	2017	2018
<b>Permanent staffs</b>		
Management (from Vice President upwards)	7	6
Commercial Division	23	21
Engineering Division	32	20
Operation Division	168	165
Construction Service Division	41	39
Corporate Affairs Division	61	72
Quality Management Division	68	70
Accounting & Finance Division	21	18
<b>Total</b>	<b>421</b>	<b>411</b>
<b>Temporary staffs</b>	608	934
<b>Grand total</b>	<b>1,029</b>	<b>1,345</b>

- **The Employee's Remuneration:** In 2018, the Company and Sahakarn Wisavakorn paid the employee's remuneration of Baht 467.78 million consisting of salary, overtime payment, bonus, social security funds and counterpart for provident funds, etc.

(Unit: Million Baht)		
Remuneration (excluding directors and executives named in the preceding section)	2017	2018
Permanent staffs	306.38	318.81
Temporary staffs	177.86	148.50
<b>Total</b>	<b>484.24</b>	<b>467.31</b>

### ● Provident Fund

The Company has established "TISCO Master Pooled Fund" - a registered provident fund managed by Tisco Securities Co., Ltd. with a view to building employee morale and spirit, and encouraging long-term employment. In 2018, the Company's and Sahakarn Wisavakorn Co., Ltd.'s contributions to this provident fund were Baht 7.01 million and Baht 1.43 million respectively.

## ● Employees Development Policy

According to TRC Group's philosophy, employees are the organization's most valuable asset. The Company's ongoing commitment and focus has always been around the management of human resources. The Company's policy on human resources development and management is summarized below.

1. The Company's recruitment of new employees is a disciplined process and takes into consideration the qualifications of individual applicant and the requirements of each position. Before starting the job, all new hires are required to attend the orientation in which each will be given clearly-defined job description in details.

2. The presence of remuneration and fringe benefits procedures, in addition, to the minimum employee welfare as required by law, the Company has designed the following benefits for employees.

2.1 Health insurance with coverage spanning in-patient and outpatient medical bills, surgical fee, accident and emergency care, and dental care.

2.2 Group life and accidental insurance.

2.3 Non-compulsory provident fund has been established for employees to accumulate savings for their retirement. Subject to the law, the Company's contribution to this fund is commensurate with the number of employment years and each employee may voluntarily decide, at his/her own discretion, to remit a contribution at a rate of 3 to 10%

3. Pursuant to the policy earlier approved by the Board, the Remuneration and Nomination Committee is responsible for considering the Company's and Sahakarn Wisavakorn Co., Ltd.'s framework and budget for salary increments and bonuses on a yearly basis. In defining the above framework that is appropriate and in line with short-term and long-term operating performance, the Committee has taken into consideration both external factors (projected inflation rate, economic situation, the average rates of salary increments and bonuses of other companies in construction business) and internal factors (the Company's operating results, long-term investment plan, historical records of salary increase and bonus).

4. Human resources development plan has been continually updated. The objective of this plan is to improve both basic and specific/technical knowledge and skills as follows.

4.1 For new employees

The Company has regularly organized an orientation session in which new employees would be provided with basic knowledge necessary for their job positions, which includes the background and business nature of TRC Group, basics of business models, corporate vision, mission and goals, basics of ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 quality management systems, basics of information technology and operating systems, and practices for safety in workplace.

4.2 For all level permanent employees

It is the Company's policy to encourage employees to periodically attend training courses in order to develop and improve their skills and proficiency in both general management

and technical subjects. The Company has also invited outside professionals as guest instructors for in-house trainings.

Trainings in 2018:

- “Safety Personnel in Management Level (Managerial Safety Personnel)”. This program deals with the roles and responsibilities of the managerial safety personnel in accordance with the laws administered by Ministry of Labour and the relevant occupational health and safety guidelines.
- The “Leadership Program” was designed for supervisory level staffs (9<sup>th</sup> level upwards) to provide them with added managerial skills and knowledge to effectively manage job tasks and subordinates.
- The “Thailand Quality Award (TQA)” course was meant to supervisory staffs, or staffs which supervisors appointed job duties to.
- The “Basic labor laws and legal contracts” course was meant for employees at all levels. The course will provide them with basic knowledge on current labor laws and legal contracts which they could effectively apply to their assign job duties.
- The annual “Key performance indicators” (KPIs) course was meant for employees at all levels to increase their understanding about job performance measurement and job performance results evaluation. Employees can effectively adopt KPIs on an individual basis in line with the Company’s policy. The KPIs system can effectively be adopted by an organization as a set of tools to help the organization achieve its objectives.
- “Safety, Occupational Health and Environment in Workplace for Employees and New Hires” is to ensure that every employee is aware of his/her roles in connection with safety in workplace which is consistent with the law governing safety, occupational health and environment in workplace.
- “Safe Working in Confined Space” is to ensure that the employer is in full compliance with the Ministerial Regulation Prescribing Safety, Occupational Health and Environmental Management Standards for Working in Confined Space B.E. 2547 (2004), and to provide employees, whose professional role is to follow their employer’s instructions, with proper training, along with necessary knowledge and practical skills, on how to work in confined space pursuant to the statutory standard practices.
- “Crane Operators, Signalers, and Riggers” is to ensure that employees whose job involves the use of crane are aware of and familiar with the requirements and guidelines on the use of crane in accordance with law on occupational health and safety, including the relevant rules and regulations. These employees had to attend the mandatory session of practical training as required by law.
- “Safety Guidelines for Electrical Technicians” is to ensure that electrical technicians know how to perform their work safely as required by law, are aware of electrical hazards and how to prevent them, and participate in first-aid exercise for the safety of both rescuer and victim.



In addition, the Company held a “Knowledge Management” seminar for 2 consecutive years, 2017 and 2018, at the Company. As one of the key elements of knowledge management process, the knowledge sharing is implemented and encouraged through a number of peer presentations/trainings where other co-workers or employees from any departments who are interested in the presentation/training topics are invited to join. Topics of peer trainings held in 2017 included, but not limited to:

- The course on “Classification of valves types” hosted by the price appraisal division was meant to provide employees with basic knowledge about valves and types of valves.
- The course on “Steps to improve railway route” was presented by the price appraisal division. The course showed the process and procedures involved in upgrading of the railway route.
- The “Thailand Quality Award (TQA)” course was presented by the quality management division. The course provided general information on the TQA system.
- The course, “In-depth look into purchase contracts” was presented by the supplies and logistics management division to educate employees about procurement contracts.

For 2018, the Company encouraged employees at all levels to attend trainings. The training hours can be summarized as follows:

(Unit: Hour)

Training (Excluding to Directors)	2017		2018	
	Internal training	External training	Internal training	External training
Staff level	476	383	511	31
Supervisory level	306	418	411	32
<b>Total training hours</b>	<b>782</b>	<b>801</b>	<b>922</b>	<b>63</b>

5. Employee relations activities. The following activities were held to build, strengthen and enrich relationship in the organization.

- 5.1 Facilitate communication between the human resource division and employees via establishment of a Group Line – “Mr. Engage”. This is to provide convenient access to information and advices to staffs.
- 5.2 Lunch Talk. This is the activity giving the Company’s staff an opportunity to socialize with management on such special occasions as Big Cleaning Day, Songkran Festival, etc.
- 5.3 Establish HRBP (Human Resource Business Partner) to effectively assist employees with problems they may have.

5.4 Five Sor activity to build employees' discipline and healthy habits. In addition to peer evaluation, the Company's management has also taken part in evaluating the achievement.

5.5 Organize annual New Year party dinner and activities to foster good relationship between the management and the employees at the head office and their counterparts at the various project work sites amid warm and casual environment.

6. The Company has recognized the importance of intra-organizational communication, especially between the Company and its employees. On the part of the Company, the communication is basically made via the Corporate Communication Department – a central unit responsible for collecting and disclosing, via a variety of channels, corporate information to all employees to ensure their understanding in corporate policies, rules and regulations, news, and events. Communication channels mainly used include the intranet, e-mail, Application Line, and bulletin boards. The information disclosed through intranet is wide-ranging e.g. ERP-based learning content, ISO 9001:2015, ISO 14001:2015, and OHSAS 18001:2007 requirements, photos of staff activities, staff news and updates which include monthly events, reminder of employees' birthdays, introduction of new employees, etc.

7. The Company has also made the principles of human rights central to the corporate culture. The Company's practices of human rights non-violation, non-gender discrimination, employment of the disabled, and gender equitable employment opportunities are testament to its true respect of human rights.

8. The Company has made available the channels – that is, HR manager and Suggestion Box – for any employees to express their opinions or submit complaints. HR manager is responsible in collecting employees' suggestions and complaints made through such channels, and bringing them to the attention of the HR Sub-Committee for consideration and further actions. The complainant's identity is to be strictly kept confidential.

- **Significant Labor Legal Dispute during the past 3 years**

None

# 10. Corporate Governance

## 1. Corporate Governance Policy

Having recognized the importance of corporate governance and its contribution to the Company's business value and sustainable growth, the Company has developed mindful of the interests of all stakeholder sectors within confines of law and the Company's regulations, and on the basis of integrity, fairness, and equality, the Corporate Governance Policy, the Business Code of Conduct, and the Ethics and Code of Conduct for Management and Employees - free booklets of these corporate policy and code of conduct have been published and given out to directors, executives and employees of the Company and its subsidiaries. The aforesaid policy and code of conduct are intended to provide directional guidelines on socially acceptable behavior which will contribute to the TRC Group's sustainable business growth. In addition to free booklets, the Corporate Governance Policy and the Ethics and Code of Conduct for Management and Employees are also made available on the Company's website and incorporated as part of Work Rules handouts for all employees.

The 1/2018 Corporate Governance Committee meeting and the 7/2018 Board of Directors meeting on November 2, 2018 and November 12, 2018 respectively reviewed the good corporate governance principles and resolved to approved the following issues:

- Reviewed the Company and its subsidiaries's compliance to the good corporate governance policy and principles of publicly listed companies (or Corporate Governance Code: CG Code). The Corporate Governance Committee and the Board of Directors reviewed the operations of the Company and its subsidiaries to see if they were in full compliance with the 8 principles of the CG Code, and assigned the management to proceed with any shortcomings / deficiencies within a reasonable time frame; and prepare the report on sustainability by the year 2019.
- Reviewed the structure of directors overseeing interrelated transactions policy.
- Approved the rules / regulations (amended version 1/2018) pertaining to disclosures of internal information which is in accordance with the Securities and Exchange Act (5<sup>th</sup> version 2016).
- Approved the charters of the Board of Directors and subcommittees and approved amendments of the charters for 3 subcommittees - the Audit Committee, Remuneration and Nomination Committee, Corporate Governance Committee.
- Acknowledged the survey project results of the 2018 corporate governance evaluation of listed firms released by the Thai Institute of Directors (IOD). The Company and its subsidiaries had an overall score of 90 (an excellent rating), equivalent to the score received in 2017, but higher than the overall score of 81 computed from 657 listed companies in the survey. Moreover, the Company and its subsidiaries also received higher than average score for each category in this survey. The survey comprised of 5 categories – shareholders' rights, unbiased treatment for all shareholders, awareness

in the role of vested parties, disclosure of information / transparency, and Board of Directors' responsibilities.

## 2. Subcommittees

The Company organizational structure consists of 7 committees; Board of Directors, Audit Committee, Remuneration and Nomination Committee, Corporate Governance Committee, Risk Management Committee, Executive Committee and Management Committee as details shown below:

### 1. The Board of Directors of the Company and Sahakarn Wisavakorn Company Limited as of December 31, 2018

- **Board of Directors of TRC Construction Public Company Limited** consists of 9 members as follows:

- |   |   |
|---|---|
| 1. Mrs. Paichit Rattananon                                | Chairman, representative from<br>KPK 1999 Co., Ltd., the Major Shareholders |
| 2. Assoc. Prof. Aekkachai<br>Nittayagasetwat, PH.D., FRM. | Independent Director  |
| 3. Mr. Arun Chirachavala                                  | Independent Director  |
| 4. Mrs. Puangthip Silpasart                               | Independent Director  |
| 5. Assoc. Prof. Pises Sethsathira                         | Independent Director  |
| 6. Mr. Smai Leesakul                                      | Executive Director  |
| 7. Mr. Pasit Leesakul                                     | Executive Director  |
| 8. Mrs. Podchanee Phaosavasdi                             | Executive Director  |
| 9. Ms. Pavita Leesakul                                    | Executive Director  |

Ms. Ounruen Sujarittham, Senior Finance and Investor Relations Manager, as the Company Secretary

The Charter of the Board of Directors of the Company and its subsidiaries are disclosed on TRC Group's website, under "Sustainable Development/Corporate Governance Report and Download information, and the Charter of the Corporate Governance Committee which covers the followings: Composition, Qualifications, Scope of Authority, Duties, and Responsibilities, Role and Duties of the Chairman of the Board of Directors, Tenure, Meeting, Quorum, Authorization of the Board of Directors, Remuneration, Performance Appraisal of the Board of Directors.

- **Board of Directors of Sahakarn Wisavakorn Co., Ltd.** consists of 6 members as follows:

- |                               |          |
|-------------------------------|----------|
| 1. Mrs. Paichit Rattananon    | Chairman |
| 2. Mr. Smai Leesakul          | Director |
| 3. Mr. Pasit Leesakul         | Director |
| 4. Mrs. Podchanee Phaosavasdi | Director |
| 5. Mr. Sakda Tantiwattanakul  | Director |
| 6. Mr. Chaveng Reesrikitti    | Director |

## Authorized Directors of the Company and its Subsidiaries

Authorized Directors of the Company and Sahakarn Wisavakorn Co., Ltd. consist of Mrs. Paichit Rattananon, Mr. Smai Leesakul, Mr. Pasit Leesakul and Mrs. Podchanee Phaosavasdi, two of four directors sign together with the Company's seal.

## Scope of Duties and Responsibilities of the Board of Directors

1. Perform duties in accordance with laws, objectives, article of association as well as the resolutions of the Shareholders' Meeting except for the transactions that shall be approved by the Shareholders' Meeting such as the connected transaction, the acquisition and disposition of assets, the purchasing and selling of significant assets as per the regulations of the Stock Exchange of Thailand or any other relevant authorities;
2. Specify and review the Board of Directors structure with regards to number of directors, the proportion of independent directors, including diverse knowledge, skills, expertise which would be appropriate to the Company's business.
3. Appoint or change the authorized directors of the Company.
4. Specify the corporate vision and mission statements, policies, strategies, objectives and direction of business operations and review it yearly. Supervise and monitor the management to ensure they operate effectively and productively in the same direction as the corporate policies, strategies and objectives in order to achieve the most economic benefits for the shareholders and to support sustainable business growth. This excludes policies and operations which require prior shareholders' approval at the shareholders' meeting.
5. Review and approve the significant transactions such as business plan, budget, large investment, management's authorities and any other transactions required by laws.
6. Monitor to ensure the Company's business strategies are being implemented accordingly. Evaluate the outcomes of the business operations by requiring regular operations results reports. Specify policy to develop / improve business operations while ensuring compliance to safety, health / sanitation, environmental regulations and social responsibility obligations, as well as the Company's human resource development.
7. Oversee and support innovations which can create value-added products or service for the Company and stakeholders.
8. Ensure that the Company's information technology system is secured and properly managed.
9. Establish the Company's policy on risk management and ensure that the Company's risk management system is effective. Review and evaluate the risk management system regularly to ensure effectiveness in dealing with changes in potential risks.
10. Ensure the Company's operations are in compliance with the listed companies' good corporate governance principles which can also help guide the Company's business operations. Regularly monitor compliance to good corporate governance principles.

11. Encourage all employees to adhere to the Company's written Business Ethics and Code of Conduct; monitor to ensure strict compliance with the Business Ethics and Code of Conduct, as well as the Company's anti-fraud and anti-corruption policy.
12. Be responsible for the operating result and the management performance with good intention and care.
13. Ensure that the Company has reliable accounting system, financial reports and auditing process as well as to provide the measurement to assess the appropriateness of the internal control system and the efficiency and effectiveness of internal auditing, risk management and financial reporting.
14. Monitor the Company's financial liquidity position and ability to repay debts, including plans or mechanisms to tackle potential problems.
15. Ensure the shareholders are involved in decision-making process of important issues of the Company. Treat major and minor shareholders, vested parties equally, in transparent manner and with the same respect. Establish convenient channels for filing / receiving of complaints from informants, or stakeholders, and provide stakeholders with access to directly contact the Board of Directors directly about issues which need to be resolved.
16. Consider the succession plan for the position of Chief Executive Officer and appointment of Chief Executive Officer, Executive Director and high level executive ranked a level under the Chief Executive Officer.
17. Establish annual performance evaluation process for the Chairman of the Board of Directors, the Chief Executive Officer and high level executives and approve the remuneration for the Chairman of the Board of Directors and the Chief Executive Officer.
18. Monitor the transparent process for the nomination, selection and appointment of the Company's directors; determine the appropriate remuneration for directors and sub-committees members.
19. Devote adequate time to perform duties and to participate in the Board of Directors' meetings and shareholders' meetings. If the director could not attend such meeting due to any force majeure, he / she must notify the Chairman of the Board of Directors, or the Company secretary prior to the start of the scheduled meeting.
20. Ensure that the conflict of interests between the Company and related persons does not exist.
21. Report the Board of Directors' responsibilities for financial reports together with external auditor's report in the Company's annual report. Such Board of Directors' report shall include all the subjects as specified in the code of conduct for directors of the listed company;
22. The Board of Directors shall be able to authorize the following transactions after they receive the Shareholders' Meeting approval to do so. For the transactions that might lead to any conflicts of interests, the director who might have such conflict of interest must not vote on that transaction.
  - (a) The transactions that are required by law to receive the Shareholders' Meeting approval.

- (b) The transactions that might lead to any conflict of interests as well as are required by laws and/or regulations of the Stock Exchange of Thailand to receive the Shareholders' Meeting approval.
- 23. Regularly seek new knowledge and develop new skills which would complement job duties as board members by attending special courses / seminars.
- 24. The Board of Directors may appoint directors and executives as deemed appropriate to serve as members of other subcommittees, to perform duties as assigned by the Board of Directors, to participate in approving the charter for each subcommittees which have to be reviewed regularly and annually, as well as the measures / procedures for approving connected transactions..

However, the abovementioned authorization to directors does not include an authorization that enables the members of each sub-committee to approve every transaction engaged with their own, or other's conflicts of interest with the Company, or subsidiary company (if any). In addition, for very connected transaction and acquisition and disposition of asset, they are also required to obtain an approval of shareholders meeting as prescribed in the Stock Exchange of Thailand's rules.

- 25. Prohibited acts of the Board of Directors;
  - 25.1 The Board of Directors shall not interfere in decision-making of the Company's management for the matters that the management is responsible to handle and as assigned by the Board, such as procurement, employee recruitment, day-to-day operation, etc;
  - 25.2 The Board of Directors shall carefully approve every connected transaction and / or any transaction with conflicts of interest and in the approval of the related transaction, directors with vested interests shall leave the meeting.

## Scope of Duties and Responsibilities of the Chairman

The Chairman has the role of overseeing policy advocacy and strategic performing manner of the Company's management including giving recommendation and support the operating of the Company's management. However, this entitle shall not participate in the daily operation. She or he shall preside as chairman of the Board of Directors meeting and shareholders' meeting, encourage all directors to participate in the meeting as well as monitoring the Board of Directors meeting and shareholders' meeting effectively and successfully.

## 2. Audit Committee

As of December 31, 2018, the Audit Committee consists of 3 independent directors as follows:

- 1. Assoc. Prof. Aekkachai Nittayagasetwat, PH.D., FRM. as the Chairman of the Audit Committee
- 2. Mr. Arun Chirachavala
- 3. Mrs. Puangthip Silpasart

Ms. Rewadee Ardham, Senior Accounting Manager, as the Secretary to the Audit Committee



Assoc. Prof. Aekkachai Nittayagasetwat, PH.D., FRM., Chairman of the Audit Committee, had extensive experience in financial statement review.

Audit Committee has 2-year term. The term of the current committee will be expired on April 24, 2019.

In 2018, the Board of Directors approved to revise the Audit Committee Charter; to expand the scope of authority and responsibilities under clause 2.2 and 2.5 to cover the employment termination of the internal auditor and accounting auditor. The latest version of this charter is posted on TRC Group's website. The charter contains 10 topics – objectives in forming the Audit Committee, the scope of authority and responsibilities, composition and qualifications, tenure, meeting, quorum, remuneration of the audit committee director, the responsible division, and maintaining of audit standards and quality.

### Scope of duties and responsibilities of the Audit Committee

1. Review and ensure that the disclosure of information in financial statements is accurate and adequate by cooperating with the Company's external auditor and management who is responsible for the quarterly and annually financial statements. Moreover, to recommend the external auditor to review or audit any transactions deemed significant during the auditing period
2. Consider, approve the internal audit plan, budget, and manpower of the internal audit work or select / propose the appointment of an internal auditor in the case of using an outsourcing service
3. Review the Company's internal control system and internal audit system to ensure appropriateness and effectiveness and consider the independence of the internal audit function as well as approve the appointment, transfer, recognition, and termination of the Head of Internal Audit and the change of internal auditor in the case of using an outsourcing service
4. Review and ensure that the Company's operations are in compliance with the rules and regulations of the Securities Exchange Commission and the Stock Exchange of Thailand, as well as relevant laws
5. To consider, select and nominate the external auditor and also propose the external auditor's remuneration including attend the meeting with the external auditor without participation of the Company's management at least once per year
6. To consider the connected transactions or transactions that may lead to any conflict of interest and non-compliance with the laws and the Stock Exchange of Thailand's regulation to ensure that those transactions are reasonable and bring highest benefit to the Company
7. To perform any duties as assigned by the Board of Directors and agreed upon by the Audit Committee such as reviewing the financial management and risk management policy, compliance with business ethic of the management and review with the management the important reports required for disclosure to the public according to the laws i.e. Management's report and analysis, etc.

8. Prepare the corporate governance report of the Audit Committee for disclosure in the Company's Annual Report in which has been signed by the Chairman of the Audit Committee and consisting of at least:
  - 8.1 Comment on appropriateness and completeness and reliability of the Company's Financial statements
  - 8.2 Comment on sufficiency of the Company's internal control system
  - 8.3 Comment on compliance with the rules and regulations of the Securities Exchange Commission and the Stock Exchange of Thailand as well as relevant laws
  - 8.4 Comment on appropriateness of the auditors
  - 8.5 Comment on connected transactions
  - 8.6 A number of Audit Committee Meetings and attendances of each member
  - 8.7 Comment or overview observation from which the Audit Committee has been gained after performing in compliance with the charter
  - 8.8 Any reports which deem appropriate to be reported to the shareholders and other general investors under the scope of works and responsibility as assigned by the Board of Directors;
9. Report all regular activities as scheduled in order that the Board of Directors can acknowledge the Committee's activities as follows:
  - 9.1 The Audit Committee's Minutes of Meetings clearly specify the Committee's comment in various issues
  - 9.2 The report of the Committee's comment on financial statements, internal audit and internal audit process
  - 9.3 Any report which deem appropriate for acknowledgement of the Board of Directors;
10. During performing their duties, if the Committee finds any doubtful transactions or behaviors as shown below which may cause a significant impact to the Company's financial status and operating result, the Committee should report to the Board of Directors for further improvement as deem appropriate:
  - 10.1 Conflict of interest transactions
  - 10.2 Any suspicion or presumption of corruption, paradox or default which are significant for internal audit system
  - 10.3 Any suspicion that there are non-compliance with the rules and regulation of the Securities Exchange Commission and the Stock Exchange of Thailand or relevant laws

In case that the abovementioned report has been and informed submitted to and discussed among the Board of Directors, the Committee and the Company's management for further improvement, however, after the due date, should the Committee finds that there is any negligence without inappropriate reason, one of the Committee's members can further report this to the Securities Exchange Commission and the Stock Exchange of Thailand

11. In case that the auditor finds any doubtful acts which are noncompliance with the laws done by director, manager or any person who are responsible for the Company's operating and the matters of fact has been reported to the Committee for acknowledgement and prompt inspection. The Committee should then report the outcome of preliminary inspection to the Securities Exchange Commission, the Stock Exchange of Thailand and the auditor for acknowledgement within 30 days after getting the auditor's report. Any doubtful acts required to be reported including the procedure to gain the matters of fact should be in line with the Capital Market Commission's regulation;
12. Have authorization to invite directors, management, department heads or employees for discussion or clarification on the Committee's inquiry;
13. Review the scope of works and responsibility as well as appraise the Committee's performance on yearly basis;
14. Perform any other duties as assigned by the Board of Directors and agreed upon by the Audit Committee.

### 3. Remuneration and Nomination Committee

As of December 31, 2018, the Remuneration and Nomination Committee consists of 4 independent directors and 2 executive director's total 6 members as follows:

1. Assoc. Prof. Pises Sethsathira as the Chairman of the Remuneration and Nomination Committee
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.
3. Mr. Arun Chirachavala
4. Mrs. Puangthip Silpasart
5. Mr. Pasit Leesakul
6. Mrs. Podchanee Phaosavasdi

Ms. Ounruen Sujaritttham, Senior Finance and Investor Relations Manager, as the Secretary to the Remuneration and Nomination Committee

Remuneration and Nomination Committee has 3-year term. The term of the current committee will be expired February 24, 2021

In 2018, the Board of Directors approved to revise the Remuneration and Nomination Committee Charter; to expand the scope of authority and responsibilities under clause 2.1 and 2.2 to cover recruiting of high level executives 1 level under the Chief Executive Officer. The latest version of this charter is posted on TRC Group's website. The charter contains 6 topics - objectives in forming the Audit Committee, the scope of authority and responsibilities, composition, tenure, meeting, report the results of assigned job duties and work performance evaluation.

## Scope of duties and responsibilities of the Remuneration and Nomination Committee

### 1. Remuneration

- 1.1 Consider and set the scope of the budget for increase of monthly salary and annual bonus for the Company, subsidiaries and Sahakarn Wisavakorn Co., Ltd. at appropriate rates in line with the overall operations results of TRC Group.
- 1.2 Specify the job performance evaluation criteria and participate in the annual job performance evaluation of the Chairman of the Executive Committee and the Chief Executive Officer and submit the evaluation results to the Board of Directors to consider and approve the appropriate remuneration accordingly.
- 1.3 Consider whether the remuneration form and criteria for directors, Chairman of Executive Committee and Chief Executive Officer are commensurate and reasonable to their obligations, performance, the Group's performance and size of business operations relative to other companies in the same industry.
- 1.4 Determine the annual remuneration rates for members of the Board of Directors and other committees, Chairman of the Executive Committee, and Chief Executive Officer before proposing only the rates for Chairman of the Executive Committee and Chief Executive Officer to the Board of Directors for approval while the rates for members of the Board of Directors and other committees are to be approved by the meeting of shareholders after being presented to the Board of Directors for preliminary consideration.
- 1.5 In case of public offering of securities or offering of warrants to directors and employees under the Employees Stock Option Program (ESOP), the Remuneration and Nomination Committee is responsible for considering the appropriateness of conditions and criteria for issuance and allotment of warrants to ensure fairness to both employees and shareholders and, in case where the warrant allotment to directors exceeds 5% of all warrants offered, giving endorsement to the transaction. In any circumstances, no members of the Remuneration and Nomination Committee shall be allowed to obtain warrants in a quantity larger than 5%.

### 2. Nomination of directors

- 2.1 Set the qualifications of directors, Chairman of Executive Committee, and Chief Executive Officer and executives at one level lower than Chief Executive Officer, such as Chief Financial Officer, Chief Marketing Officer, Chief Operation Officer and other executives (if any), in terms of knowledge, experience, and expertise in alignment with the Company's requirements. Any individual to be nominated as director shall be able to dedicate his / her time and effort to the fulfillment of directorship duties.
- 2.2 Recruit, select person(s) with qualifications appropriate to serve as directors, Chairman of Executive Committee, and Chief Executive Officer and executives ranked one level lower than the Chief Executive Officer as mentioned in clause 2.1. Considerations for the appointment are as follows:

- The Board of Directors for consideration in case of vacancy due to expiration of term and/or addition of director; after the Board's consideration, the nominated candidate will be presented to the meeting of shareholders for official appointment; or
- The Board of Directors' meeting for official appointment in case of vacancy due to resignation or inability to serve as director.
- Propose at the Board of Directors' meeting that the Board appoints the Chairman of Executive Committee, and Chief Executive Officer and management executives at one level below the Chief Executive Officer.

2.3 Consideration of the succession plan of Chief Executive Officer to propose to the Board of Directors for approval.

In addition, the Remuneration and Nomination Committee shall perform any other duties as assigned by the Board of Directors. The Board of Directors has the right to adjust the scope of duties and responsibilities of the Remuneration and Nomination Committee as deemed necessary or appropriate

#### 4. Corporate Governance Committee

As of December 31, 2018, the Corporate Governance Committee consists of 2 independent directors and 2 executive director, total 4 members as follows:

1. Mr. Arun Chirachavala as the Chairman of Corporate Governance Committee
2. Assoc. Prof. Pises Sethsathira
3. Mrs. Podchanee Phaosavasdi
4. Ms. Pavita Leesakul

Ms. Jarunluk Rongkrathok, Company Secretary Assistant, as the Secretary to the Corporate Governance Committee

Corporate Governance Committee has 3-year term. The term of the current committee will be expired on March 19, 2021.

In 2018, the Board of Directors approved to revise the Corporate Governance Committee Charter with regards to the composition to match the appointment of 1 additional director to serve as Corporate Governance Committee member. This revised charter was posted on TRC Group's website; comprising of 6 topics – scope of authority and responsibilities, composition, tenure, meeting, report the results of assigned job duties and work performance evaluation.

#### Scope of duties and Responsibilities of Corporate Governance Committee

1. Review the corporate governance policy, business ethic including policy and guideline practice on corporate and social responsibility which has been reviewed and proposed by the Company's management in term of compliance with the good corporate governance practice prior to being proposed to the Board of Directors.

2. Propose the guideline and/or policy related to the good corporate governance to the Board.
3. Suggest the Board on the good corporate governance issues.
4. Monitor the Company's management to conduct the good corporate governance practically.
5. Follow up and report corporate social responsibility activities to the Board.

In addition, the Corporate Governance Committee has to perform tasks as assigned by the Board of Directors and the Board of Directors has its authority to change scope of duties and responsibilities of the Committee as deemed necessary or appropriate.

## 5. Risk Management Committee

As of December 31, 2018, the Risk Management Committee consists of 2 independent directors and 2 executive directors total 4 members as follows:

1. Mr. Arun Chirachavala as the Chairman of Risk Management Committee
2. Assoc. Prof Aekkachai Nittayagasetwat, PH.D., FRM.
3. Mr. Pasit Leesakul
4. Mrs. Podchanee Phaosavasdi

Ms. Pavita Leesakul, Vice President, Corporate Affairs Division, as the Secretary to the Risk Management Committee

Risk Management Committee has 2-year term. The term of the current committee will be expired on November 13, 2021

The Risk Management Committee Charter is posted on TRC Group's website; comprising of 6 topics – composition, qualification, tenure, scope of authority and responsibilities, meeting, report the results of assigned job duties and work performance evaluation.

## Scope of duties and Responsibilities of the Risk Management Committee

1. Formulate risk management policy as well as a framework for managing the Company's overall exposure to a range of significant risks e.g. bid risk, risk related to supply of materials/equipment, construction risk, financial risk, personnel risk, etc. and to provide to the Board of Directors and the management the consultation, advice and recommendations in relation to risk management.
2. Develop risk management plan and ensure the proper implementation of the plan.
3. Oversee the undertaking of tasks related to risk management and develop a strategy in alignment with the corporate vision, mission, and goals.
4. Oversee, support, and encourage the cooperation of all units across the organization in managing risks and to review, on a regular and continual basis, the adequacy of the risk management system to ensure optimal efficiency.

5. Report and update the following matters to the meeting of Board of Directors:- a list of significant risks, risk assessment, risk management, impacts on business operation, preventive and remedial measures, and other events that materially affect the Company (this last matter must be brought to the Board of Directors' attention without delay).
6. The Risk Management Committee has the authority to establish a working group responsible for executing risk management and reporting to the Risk Management Committee.
7. Perform other tasks as assigned by the Board of Directors.

## 6. Executive Committee

As of December 31, 2018, the Executive Committee consists of 4 executive directors as follows:

1. Mr. Smai Leesakul as the Chairman of the Executive Committee
2. Mr. Pasit Leesakul
3. Mrs. Podchanee Phaosavasdi
4. Mr. Loh Eng Kee

Ms. Rungrapa Bupparit, the Executive Secretary, as the Secretary of the Executive Committee

## Dissolution of the Management Committee in January 2019

The 1/2019 Board of Directors Meeting on January 15, 2019 to dissolved the Management Committee and approved to revise the scope of authority and responsibilities of the Executive Committee to cover the scope of authority and responsibilities of the Management Committee and transfer the authorization and management authority from the dissolved Management Committee to the Executive Committee; which comprise of 5 topics – composition, scope of authority and responsibilities, tenure, meeting and report the results of assigned job duties.

The charter of the Executive Committee is disclosed on TRC Group's website.

**Scope of authority and responsibilities of the Executive Committee** (as approved at the 1/2019 Board of Directors Meeting on January 15, 2019; with addition of scope of authority and responsibilities of the dissolved Management Committee).

1. Set policies, targets, strategies, business and operations plans, allocate annual expense and investment budgets, scope of authorization chart, scope of authority of management authority and management structure for the Company's core business operations, including consideration to revise / improve various functions to support changes in the economic and competitive environment; for proposal to the Board of Directors for consideration and approval.
2. Oversee to ensure business operations are proceeding efficiently and effectively in accordance to corporate polices, objectives, business plans / strategies and annual



budgets approved by the Board of Directors; provides advice / suggestions to the management when necessary.

3. Responsible for establishing current / savings, loan / credit line accounts, bank guarantee, collateral, mortgage, etc. with banks / financial institutions, including purchase / sale and registration of land plots in accordance to the corporate business operations objectives which must receive approval from Board of Directors.
4. Responsible for entering into business contractual agreement on behalf of the Company, including contracts pertaining to purchase of assets, or rights to the use of assets for the benefits of the Company; specify how to negotiate in establishing such contractual agreements.
5. Consider profit and loss of the Company and propose the interim or annual dividend and propose to the Board of Directors;
6. Review the actual operations results of the Company and subsidiaries every quarter and compare it to the planned budget figures prior to proposing it to the Board of Directors.
7. Has the authority to hire, appoint, transfer, remove, terminate employment, set the remuneration, grant rewards, increase salaries, compensation, bonus for managerial level staffs (from the assistant division manager up). However, the authority to hire, appoint, transfer, remove, terminate employment high level executive (1 level below the Chief Executive Officer) rest with the Remuneration and Nomination Committee.
8. Proceed with other matters to lend support, or as assigned by the Board of Directors.
9. Consider and report to the Board of Directors the transactions which are in questions of fraud or illegitimate or irregular activities;
10. To perform any other duties as assigned by the Board of Directors

The Executive Committee is authorized to empower the management of the Company to approve any financial transactions as appropriate.

#### Budget Authorization Authority of the Executive Committee and Chief Executive Officer

The Executive Committee and the Chief Executive Officer are authorized to approve budgets for various expenses in accordance to the handbook on authorization authority and implementation, such as:

Issue	Executive Committee	Chief Executive Officer
- Approval of project budget	-	Unlimited
- Allowance for bad debts	5-10 MB	≤ 5 MB
- Advances	-	> 100,000 Baht/each time
- Accommodation budget, public relations, donations	-	> 50,000 000 Baht/each time
- Intercompany short-term loans	50-100 MB	≤ 50 MB

## 7. Management Committee (dissolved by Board of Directors at meeting held in January 2019)

As of December 31, 2018, the Management Committee consists of 10 members as follows:

- |                                  |   |
|----------------------------------|---|
| 1. Mr. Pasit Leesakul            | Chief Executive Officer<br>as Management Committee Chairman |
| 2. Mrs. Podchanee Phaosavasdi    | Chief Commercial Officer                                    |
| 3. Mr. Loh Eng Kee               | Deputy Chief Operating Officer                              |
| 4. Mr. Sakda Tantivathanakul     | Deputy Chief Operating Officer                              |
| 5. Mr. Chaveng Resrikitti        | Deputy Chief Operating Officer                              |
| 6. Ms. Pavita Leesakul           | Vice President, Corporate Affairs Division                  |
| 7. Mr. Wison Akethummakul        | Assistant Vice President, Engineering Division              |
| 8. Mr. Amnuay Laimai*            | Quality Management Division Advisor                         |
| 9. Mr. Nitithat Tip-anuntasakul* | Material Management and<br>Logistics Department Advisor     |
| 10. Mr. Supachoke Liamkaeo       | Corporate Strategic Departure Advisor                       |

\* Employment contract ended on December 31, 2018

Ms. Rungrapa Bupparit, the Executive Secretary, as the Secretary of the Management Committee

### Scope of duties and responsibilities of the Management Committee

1. Set the business plan, budget and management authorities of the Company and propose to the Board of Directors for approval;
2. Oversee the Company's operations to ensure that they are in compliance with the business policies, business plan and strategies which have been approved by the Board of Directors;
3. Consider the engagement in business contracts and/or any other asset purchasing contracts in relation to the business of the Company as well as to set the procedures and negotiation methods for such contracts;
4. Approve the capital expenditure as stated in the annual business plan which has been approved by the Board of Directors;
5. Be responsible for any financial transactions with banks including account opening, lending, borrowing, providing lending facilities, managing the collateral, pledging, mortgage and guarantee as well as selling, purchasing and registering land deeds for the benefits of the Company as per the approval of the Board of Directors;
6. Consider and compare the Company's quarter operating performance with the budget and propose to the Board of Directors;

7. Employ, appoint, transfer, discharge, dismiss, determine remuneration of, give reward to and raise salaries, wages and bonus of employees in management level from Assistant Vice President upwards;
8. Do any other duties in order to support the aforementioned duties or as delegated to do so by the Board of Directors or the Executive Committee; and
9. Consider and report to the Executive Committee or the Board of Directors the transactions which are in questions of fraud or illegitimate or irregular activities.

The Board of Directors or the Executive Committee is authorized to amend the scope of duties and responsibilities of the Management Committee as appropriate.

### Changes involving the Executive Director and Subcommittee in 2018

August 1, 2018	Mr. Loh Eng Kee resigned as Executive Director, but retains his executive position with the Company
August 8, 2018	The 6/2018 Board of Directors' meeting resolved to appoint Miss Pavita Leesakul as Executive Director, to replace Mr. Loh Eng Kee who resigned
November 12, 2018	The 7/2018 Board of Directors' meeting resolved to appoint Miss Pavita Leesakul as Corporate Governance Director
January 15, 2019	The 1/2019 Board's meeting resolved to dissolve the Management Committee; approved to expand the scope of authority and responsibilities of the Executive Committee to cover the duties of the Management Committee, and transfer the authorization and management authority from the dissolved Management Committee to the Executive Committee.

## 3. Nomination Process of Director and Top Management

### (1) Independent Director

#### Criteria of Independent Director Selection

##### ● Process of Independent Director Nomination

The Remuneration and Nomination Committee shall preliminary consider suitable persons whose qualifications are in accordance with the regulations of the Securities Exchange Commission and the Stock Exchange of Thailand. The candidates shall have knowledge and capability that are useful for the Company. The suitable candidates will be proposed to the Board of Directors and the Shareholders' Meeting for approval, respectively. (Only the increase of the number of directors and the appointment of directors in replacement of directors retiring by rotation shall be approved by the Shareholders' Meeting.)

- **Qualifications of the Independent Director**

The qualifications of the independent director are set out in accordance with the regulations of the Securities Exchange Commission as follows:

1. Not hold shares exceeding 0.75% of the total number of voting shares of the Company, its parent company, subsidiary, affiliate, major shareholder or controlling person including shares held by related persons of the independent director.

2. Neither be nor have been an executive director, officer, employee, controlling person or advisor who receives a salary of the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person.

3. Not be a related person by blood or registration under law, such as a father, mother, spouse, sibling, or legitimate child, including spouses of children, executives, major shareholders, controlling persons, or persons to be nominated as executives or controlling persons of the Company or its subsidiaries.

4. Neither have nor used to have a business relationship with the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person, in a manner which may interfere with his or her independent discretion, and neither being nor having been a substantial shareholder or controlling person of any entity having business relationship with the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person who may have a conflict of interest unless the foregoing status ended not less than two (2) years prior to the date of appointment.

5. Neither be nor have been an auditor of the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person nor be a substantial shareholder, controlling person or partner of an audit firm which employs auditors of the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person, unless the foregoing relationship ended not less than two (2) years prior to the date of appointment.

6. Neither be nor have been any kind of professional advisor including a legal advisor or financial advisor who receives an annual service fee exceeding two (2) million baht from the Company, its parent company, subsidiary, joint venture, major shareholder or controlling person, and not have been a substantial shareholder, controlling person or partner of the professional advisor unless the foregoing relationship ended not less than two (2) years prior to the date of appointment.

## **(2) Director and Top Executive Selection**

- **Director Selection**

Nomination and appointment of director are responsible by the Remuneration and Nomination Committee to nominate and consider a person having suitable qualification, experience of working to be further proposed, for approval of appointment, to the Board of Directors and shareholder meeting, respectively (only the increase of the number of directors and the appointment of directors in replacement of directors retiring by rotation shall be approved by the Shareholders' Meeting.) under the following criteria and procedure :

1. A shareholder is equal to one share one vote.
2. Shareholders will vote for director appointment on individually basis.

3. Candidate gaining the highest votes in sequence will be appointed as director and the number of appointed director subject to required number of director vacancy. In case of a tie of votes and qualified candidates are exceeding the required number, the Chairman of the meeting shall have an additional casting vote.

At the annual general meeting of shareholders, one-third of directors shall retire by rotation. In case the number to be divided cannot be made, the retiring number should be the number nearest to one-third.

For the retiring director in the first and second years after the company's registration, drawing-lots method shall be applied to decide who will retire by rotation whereas for the next year, directors holding the longest service term shall retire and those retiring are eligible to be re-elected for another term.

#### ● Top Executive Selection

The top executive selection is the Chief Executive Officer, including recruiting of high level executives, 1 level below the Chief Executive Officer, such as Chief Financial Officer, Chief Operating Officer and Chief Marketing Officer, shall be undertaken by the Remuneration and Nomination Committee to select candidates having suitable qualification, experience of working to be further proposed to the Board of Directors for approval. The policy and criteria for selection of the top executives including succession plan for emergency case or retirement are set forth to avoid any impact to the Company's business as follows:

- The Board of Directors approved to set up the succession plan for Chief Executive Officer position as well as experience transfer to their potential subordinates to work in their replacement for emergency case or retirement.

- The basic qualifications of Chief Executive Officer are as follows:
  - The education should be not lower than a master degree in engineering field or business administration or other related fields. In case of being educated in lower degree, it is subject to the discretion of the Remuneration and Nomination Committee on his other qualifications.
  - Having experience of not less than 10 years in the top executive position management
  - Having leadership character with wide vision
  - Be capable in strategic planning and organizational management
  - Having cautious decision making and problem solving with recognition of highest benefit of the Company

- **Policy for Chief Executive Officer and directors to hold director position in other companies**

The Board of Directors had set up a policy that the Chief Executive Officer and directors holding director position in other companies should be in compliance with the Company's Article of Association, Section 13, paragraph 2 stating that

"A director is prohibited from being a partner or unlimited partner in a business entity or hold a director position in a private company or any other company that conducts a similar type of business or in competition against the Company's business activities, except where the General Meeting of Shareholders is notified prior to the appointment resolution."

And require that each director holds a director position at not more than 5 listed companies. However, should a director and the Chief Executive Officer hold a director position in another company which does not fit the above case, they must notify the Board of Directors accordingly.

#### **4. Subsidiaries and Joint Venture Performance Monitoring**

The Board of Directors has set up the policy and authorized the Company's management to monitor the performance of subsidiaries and joint venture as follows:

- Consider and assign qualified candidates to act as the Company's representatives to be directors and/or executives of subsidiaries and joint venture in proportion of shareholding so as monitor and control those business.
- Report for acknowledgement of the Board of Directors about assignment together with their qualifications
- Monitor subsidiaries and joint venture to perform their operation in compliance with the authority table including disclosure and any action complying with the SET's law, regulation and notifications as well as the guideline practice of connected transaction and acquisition or disposition of assets.
- Report the summary of subsidiaries and joint venture's operating performance to the Board of Directors on quarterly basis. In addition, in case of significant transaction such as an increase or decrease of capital, company dissolution, etc., it is required to being proposed for prior approval of the Board of Directors.

#### **5. Regulating the Use of Internal Information**

The 7/2018 Board's meeting held on November 12, 2018 resolved to approve the Company's rules / regulations governing the use of the Company's internal information stated in the revised / amended version (1/2018) which aligns with the Securities and Exchange Act (No. 5) B.E. 2559 (2016). The amended version replaces the previous version which was approved for use in 2005. This set of Company's rules / regulations is a part of the TRC Group's work operations rules / regulations; details as follows:

## Definition of Internal Information

Internal information is information which must not be disclosed to any person prior to release to general investors. This comprise of information which has not been approved for disclosure to the general public; information which is relevant to the change in the price, or value of the Company's stocks; information of the Company, or an insider which could influence change in share price, and / or investor's decisions. Such information also include information about listed companies, major shareholders, person(s) with significant authority, or important executive of listed firms; and information which has adequate substance and clarity to influence investors' decisions.

## Rules, Regulations on Use of Internal Information

1. The Company and its subsidiaries will adhere to the generally accepted practice of listed companies as required by The Stock Exchange of Thailand (SET) pertaining to the disclosure of internal information which could influence investors' decisions, before such information is released to the securities analysts, outsiders, or the general public. The Chief Executive Officer (CEO), Division Directors and the Company Secretary have been assigned to serve on behalf of the Company to act as spokesperson in disclosing approve information to investors, and the general public.
2. Directors, executives, staffs and employees of the TRC Group and outsiders who have access to the TRC Group's internal information, are required not to disclose such information, or allow it to leak to outsiders and in accordance to the announced guidelines on "proper use, safeguard and management of information technology", as well as limited access (authorized personnel only) to computer server room and prevention of potential damage risk to the Company's information technology system. Company's internal information must not be disclosed without prior approval, or for the benefit of others, or personal gain, both directly and indirectly.

Person/who are temporarily employed by the Company, or its subsidiaries for specific projects, such as contractors, legal and/or financial advisors should sign Confidentiality Agreement with the Company, or its subsidiaries to safeguard against unauthorized disclosure of internal information to outsiders as they may have some access to internal information during the course of performing assigned job tasks/projects for the Company, or its subsidiaries.

3. Company and subsidiaries' directors, executives, employees, temporary staffs are prohibited from disclosing confidential, or internal information (which has not been officially released by the Company/subsidiaries to the general public), to others for profit-making on changes in share price, or for personal use to earn profit from securities trading transactions by using (directly/indirectly) such information which can affect the Company/subsidiaries share price.

In addition, the Company/subsidiaries' directors, executives, employees, temporarily staffs assigned to work units/divisions which have some access to the Company/subsidiaries' internal information, including spouses (married/unmarried and children (under adult age) must not trade in Company/subsidiaries' stocks 1 month before the Company/subsidiaries' quarterly and annual financial statements



reports are officially released and within 24 hours after the official release of such information to the public.

Furthermore, if the person/people mentioned above received internal information which may affect share prices of the Company/subsidiaries, or other listed firms which have not yet release such information to the general public, they must not trade in securities of the Company/subsidiaries, or those listed firms before 24 hours after the such information is officially disclosed to the general public.

4. Directors, executives, accounting auditor, temporary executives, representative, planner, executive planner, temporary executive planner, must report changes in value of the securities they hold, including forward contracts related to their Company/ subsidiaries, as well as person(s) closely related to them, in accordance to Article 59 of the 5<sup>th</sup> Securities Exchange Act BE 2559 (2016) 59 – pertaining to the procedure in submitting a notice (in digital form) to the SEC and SET within 3 days of the securities trading/transfer; including notifying the Company's Secretary for the purpose of preparing a report to inform the Board of Directors of such changes.

Anyone who violated, of failed to abide by Article 59, will be subject to penalty stated under Act 275\* of the Securities Exchange Act BE 2535 (1992) and other amended versions.

5. Failure to abide by these rules / regulations is considered a serious offense.

## 6. Audit Fee

### - Audit Fee

	Audit Firm	2018 Audit Fee
TRC Construction Public Company Limited	EY Office Limited	Baht 1,050,000
<b>Subsidiaries:</b>		
Sahakarn Wisavakorn Co., Ltd	EY Office Limited	Baht 850,000
TRC International Limited	Simon W.F. Ng & Co., Hong Kong	USD 3,200
TRC Investment Limited	S.C.Ng Fuk Chong, FCCA Mauritius Republic	USD 1,350
TRC Middle East LLC	Talal Abu-Ghazaleh & Co., Sultanate of Oman	Oman Rial 3,200
TRC Engineering LLC	Talal Abu-Ghazaleh & Co., Sultanate of Oman	Oman Rial 3,200
TRC Utility Company Limited	EY Office Limited	Baht 400,000
SH Crossings Company Limited	EY Office Limited	Baht 400,000
<b>Joint Venture:</b>		
Hydrotek Sahakarn Joint Venture	EY Office Limited	Baht 400,000

#### - Non-Audit Fee

Travelling expenses of the auditors for 2018 audit tasks

- TRC Construction Public Company Limited	Baht	11,510
- Sahakarn Wisavakorn Company Limited	Baht	1,792

## 7. Compliance with Good Corporate Governance Code, Principles and Other Issues

The Board of Directors stresses the importance of strict compliance with the Good Corporate Governance Code and Principles (2017) which publicly listed companies are required to adopt as required by the regulating state agencies, such as The Stock Exchange of Thailand (SET) and the Securities Exchange Commission (SEC). The Company's Corporate Governance Committee is assigned by the Board of Directors to ensure the Company's policies, ethics, management activities and business operations adhere to the good corporate governance code and principles and widely accepted international practice. The Company's Corporate Governance Committee is responsible for reviewing and evaluating the Company's compliance with the good corporate code and principles regularly and report to the Board of Directors every year.

At the 1/2018 Board of Directors' meeting held on November 2, 2018 and the 7/2018 Board's meeting held on November 12, 2018, the Board of Directors reviewed the Company's operations to ensure compliance with the Good Corporate Governance Code and Principles (2017) for listed companies issued by the SEC and SET; and instructed the management to review the Company's current handbook on corporate governance to see if any revision / amendment is necessary to ensure compliance with the current Good Corporate Governance Code (2017) for listed companies, and propose the amended version (if any) to the Board of Directors for approval and to officially announce the amended version as replacement for the outdated version. The time frame for the revision / amendment (if any) must be completed within the year 2019.

Even though the Company's current 2017 handbook on good corporate governance was prepared in accordance to the guidelines of the SEC and the SET, there are some issues which the Company has yet to adopt / implement, such as the followings:

Category pertaining to the role of stakeholders

- The Company should prepare a report on sustainable development with the framework of the Global Reporting Initiative (GRI)  
Implement according to suggestions : will implement within 2019

Category pertaining to Board of Directors' responsibilities

- The Company has yet to set the policies and tenure for independent directors in accordance to the corporate governance code (CG Code) which stated that the tenure for independent directors should not exceed 9 years.
- The Chairman of the Board of Directors should be an independent director
- If the Chairman of the Board of Directors is not an independent director, establishing some balance of power is necessary, such as requiring that more than half of the directors should be independent directors and an independent director should be involve in the consideration of the meeting agendas, the directors to carry tasks in accordance to suggestions to recruit more independent directors

## Information Disclosure in Accordance to Corporate Governance Code / principles

### 1. Rights of the Shareholders

The Company has a policy to equitably facilitate all the shareholders for the Shareholders' Meeting attendance, exercising of their voting rights, gaining of dividend payment as well as the information disclosure. In addition, the Company also provides an opportunity for shareholders to propose in advance meeting agenda and nominate qualified persons to be elected for director position and also to raise their questions, freely express their opinion during the Shareholders' meeting as well as encourages the Board of Directors, management and independent auditors to unanimously participate in the meeting.

There was only one meeting held for 2018 Annual General Meeting of Shareholders on April 27, 2018 and during the year there was no extraordinary meeting. The Company has performed in compliance with the good corporate governance practice as follows:

- **Invitation to shareholders' meeting**

On September 14, 2018, the Company disseminated, via channels on the Stock Exchange of Thailand's SET Community Portal and the Company's website (section "INVESTOR CORNER"), the information about the upcoming shareholders' meeting, welcoming shareholders' proposal for the 2018 Annual General Meeting of Shareholders' agenda, including the proposal of qualified candidates for the directorship positions. The invitation was open between September 17 to December 31, 2018 during which both the Corporate Governance Committee meeting scheduled to consider the nomination of new directors to replace the ones retiring by rotation and the Board meeting in which the agenda for the upcoming annual general meeting of shareholders had to be concluded were not yet held. Shareholders' proposals could be addressed to either Chairman of the Audit Committee or the Company Secretary via any of these 3 channels:- e-mail message, fax, or postal mail. However, there was no proposed candidate from the shareholders.

To provide shareholders an opportunity to know in advance of what would be discussed and considered in the meeting, the Invitation to the 2018 Annual General Meeting of Shareholders together with supplementary documents provided in both Thai and English languages were publicly disclosed on the Company's website 30 days prior to the meeting (March 27, 2018). The same information was also made available to any investors and shareholders on the Stock Exchange of Thailand's SET Community Portal.

Letters of Invitation to the 2018 Annual General Meeting of Shareholders accompanied with other information related to meeting agendas were dispatched to shareholders not less than 14 days in advance and also published on newspaper 3 days in advance for 3 consecutive days. In the 2018 Annual General Meeting of Shareholders, all 9 directors were present, including Chairman of the Board, Chairman of Executive Committee, chair of each and every sub-committee, executives, a legal consultant and an auditor. For shareholders' convenience, a barcode technology was used in the attendance registration and counting of votes. For each agenda, the Board's opinion as well as other relevant information would be given to assist shareholders in making decisions.

- **The General Meeting of Shareholders Day**

Prior to starting the meeting, the Chairman of the Meeting introduced directors, legal advisor and auditors to attending shareholders. The Legal Advisor explained the process of the

meeting, method of vote casting and required votes for resolution of each agenda. The meeting proceeding was held in sequence of the meeting agenda without any additional ones unstipulated in the notice of the meeting. For the agenda of directors' remuneration, the policy of remuneration and procedure was separated into remuneration for directors and sub-committee. During the meeting, the chairman of the meeting allowed all attending shareholders to cast their votes on individually basis for the agenda of director appointment and they could appoint the qualified candidates by casting votes with ballot as an evidence of appointment. For each agenda, ballot method was allowed in case of disagreement or abstention. Moreover, the shareholders could equitably and freely express their opinions, suggestion or raise questions relating to the Company's performance prior to exercising their votes.

- **After the General Meeting of Shareholders Day**

The Company recorded inquiries, opinions, and essential details in the Minutes of the Meeting to facilitate future audits by the shareholders as follows:

- (1) Counting of votes and minimum number of votes required for each agenda
- (2) The votes of the shareholders which were clearly segregated as "Approval", "Disapproval", and "Abstention", in terms of number of votes and proportion for each agenda item
- (3) List of names and positions of directors, executives, advisor and the auditor who were present at the shareholders meeting
- (4) Summary of inquiries, opinions, and recommendations of the shareholders as well as response of the directors and the management to the inquiries made by the shareholders in each agenda item, for information of the shareholders who were absent from the shareholders meeting

The Company later submitted the copy minutes of the 2018 Annual General Meeting of Shareholders to the Stock Exchange of Thailand and the registrar of the public companies limited, Department of Business Development, Ministry of Commerce within the specific 14 days from the meeting date and noticed the minutes information in both Thai and English including meeting's video and recorded sound through the Company's website within 30 days after the meeting.

The Company allocated the shares of the retail shareholders in accordance with the requirements of the Stock Exchange of Thailand. As at March 26, 2018, on which the shareholders register book was closed to determine entitlements to attend the 2018 shareholders meeting, the Company's shares held by retail shareholders accounted for 63.81%.

## **2. Equal treatment for all shareholders**

The Company and subsidiaries' policy is to treat all shareholders equally in accordance to Section 2: Good Corporate Governance Policy / Principles of Good Corporate Governance / (2) Equal Treatment for all Shareholders of the Good Corporate Governance handbook (January 2017).

## **3. Roles of Stakeholders**

The Company realizes the importance of those internal and external stakeholders as all their supports can strengthen the Company's competitiveness and enhance the profit. Therefore; the Company will perform its business in compliance with the related laws and regulations in order that the stakeholders can obtain a good attention. "Code of Conduct and Business Ethics Practice"

disclosed through the Company's website on the item of "Sustainability" to be as guideline of practice towards the stakeholders especially for strict adherence of the Company's management and employees.

Policies and guidelines for treating stakeholders of various groups as stated in the Good Corporate Governance handbook (January 2017) Section 2 Good Corporate Governance Policy/ Principles of Good Corporate Governance / (3) Role of Stakeholders, which are segregated under sub-headings: employees, shareholders, business rivals, clients, business partners, officers, technology system, intellectual property, patent, copyright, human rights violation, society and communities, quality management system, workplace safety and sanitation, environmental preservation and anti-corruption policy.

In addition, the handbook specified guidelines for treating stakeholders, business rivals, clients, business partners and/or lenders and employees, similar to section 3 of the business ethics handbook. This is to ensure that directors, executives, employees are aware of and understand that they must strictly abide by those guidelines.

The Company/subsidiaries have disclosed their activities with regards to compliance to quality management system, workplace safety/sanitation and environmental preservation under clause 11. Social and Environmental Responsibilities.

#### Channel for stakeholders' contact and complaint

The Company arranges the channels for investors and stakeholders to communicate with the Board of Directors any concerns about illegal or unethical practices, incorrect financial reporting, insufficient internal control or other complaints which may cause some impact to the Company via the followings:

Whistle blower	Tel. / fax	Channels for Providing Information	
		E-mail address)	Postal service
1. Chairman of Audit Committee	+66 2022 7777 # 3201/ +66 2022 7788	chairman.auditcom@trc-con.com Or TRC's website (www.trc-con.com) under "About us"/ "Send e-mail to Audit Committee Chairman"	Mail letter addressed to person at TRC Construction Plc, at 8 Soi Sukhapibarn 5, Soi 32 Tha Raeng, Bangkok, Bangkok 10220
2. Company Secretary		ounruen@trc-con.com	
3. Company's staffs in charge		Contract via Company's website under "About us/ Contact us / Whistleblower, and send e-mail to the Company / subsidiaries	

For the second and the third whistleblowing channel, the Company Secretary is responsible for receiving reports or complaints and to further submit to the Chairman of the Audit Committee. The Chairman of the Audit Committee will further investigate; gather data and documents to be reporting to the Board of directors. The Company recognizes the importance of maintaining confidentiality of the complaints received,, the procedures for handling complaints and conducting investigation are set up. The complaints shall be limited to be disclosed to only relevant parties.

The Company also set up the system to listen to the opinions, recommendations or complaints made by the employees. In doing, the Company has the process for handling complaints filed by employees and considering whether the particular complaint is regarded as a wrongdoing and how severe such wrongdoing is. This enables the Company to impose punishments against particular wrongdoings in a fair and proper manner.

The Company allows the employees to submit complaints, clues, or opinions through the following channels.

1. Voice Box which is opened once a month by the Manager of the HR Department
2. Complaint channel via supervisor according to reporting line as specified in the work rules

The Company will compile complaints or recommendations deemed important or requiring further actions for submission to the Workplace Welfare Committee.

The Company disclosed the process and channels for handling complaints in its website and annual report in order to instill confidence among complainants or whistle blowers. The Company gives importance to treating the complaints received as confidential and hence set up the steps for receiving complaints and conducting investigation, requiring that the complaints received must be known by the relevant parties only.

#### 4. Information Disclosure and Transparency

It is the corporate policy for the Company to disclose material information, including any news relevant to the Company whereby the disclosure of information must be made in a complete, timely, transparent, fair and trustworthy manner via easily accessible channels e.g. the Stock Exchange of Thailand's SET Community Portal and/or the Company's website pursuant to the SET's regulations. The Company's disclosed information is made available in both Thai and English languages e.g. the Company's profile, financial information, annual reports, PR news. The information on the Company's website is regularly updated to keep shareholders and stakeholders informed of the latest news and development.

The disclosure of information as stated in the Good Corporate Governance handbook (January 2017) under "Good Corporate Governance policy/Principles of Good Corporate Governance / (4) Information Disclosure and Transparency" which comprise of the shareholders structure, remuneration of directors and management executives, report of vested interest, report on holding of securities by directors and management executives, public information communication channel, financial statements, and accounting auditor.

The Company and subsidiaries have a policy requiring directors, management executives and employees to declare, or report their vested interest every year and every time there is a change (if any), including preparation of a document to confirm their independent status each year; and submit it to the Company Secretary who will present it to the Chairman of Audit Committee and

the Chairman of Board of Directors for acknowledgment within 7 working days, as of the date the report was received; in accordance to the Securities Exchange Act BE 2535 (1992). Furthermore, such information can also be used to check for and avoid potential conflict of interest. As for the report on holding of securities, the rules pertaining to the supervision and use of internal information will be applicable.

- **Acquisition and sale of securities of the Company and Subsidiaries by Directors and Management Executives**

In 2018, Directors and Managements have any changes in relation to shares transaction as following;

Name	Position	Shares as at Dec 31, 2017	Acquire during the year <sup>(1)</sup>	Disposal during the year	Shares as at Dec 31, 2018 (Paid up capital Baht 770,395,728.12)	
					Share	%
1. Mrs. Paichit Rattananon	Chairman	7,499,750 (In the name of Mrs. Paichit)	2,973,557	-	22,444,699	0.364
		1,453,284,277 (In the name of KPK 1999 Co., Ltd.) <sup>(2)</sup>	83,044,815	-	1,743,941,131	28.296
Total					1,766,385,830	28.660
2. Assoc. Prof. Aekkachai Nittayagasetwat, PH.D., FRM.	Independent Director and Chairman of Audit committee	4,743,748	271,071	-	5,692,497	0.092
3. Mr. Arun Chirachavala	Independent Director and Audit committee	3,375,000	192,857	-	4,049,999	0.066
4. Mrs. Puangthip Silpasart	Independent Director and Audit committee	-	-	-	-	-
5. Assoc. Prof. Pises Sethsathira	Independent Director	3,375,000	192,857	-	4,049,999	0.066
6. Mr. Smai Leesakul	Director and Chairman of Executive Committee	11,071,635	5,138,379	-	67,905,961	1.102
7. Mr. Pasit Leesakul	Director and Chief Executive Officer	1,350,000	334,285	-	7,019,999	0.114
8. Mrs. Podchanee Phaosavasdi	Director and Chief Commercial Officer	-	-	-	-	-



Name	Position	Shares as at Dec 31, 2017	Acquire during the year <sup>(1)</sup>	Disposal during the year	Shares as at Dec 31, 2018 (Paid up capital Baht 770,395,728.12)	
					Share	%
9. Ms. Pavita Leesakul	Director and Director Corporate Administration Division	9,452,900	540,165	-	11,343,479	0.184
10. Mr. Loh Eng Kee	Chief Operating Officer	1,096,312	62,646	-	1,315,574	0.021
11. Mr. Chaveng Reesrikitti	Vice Chief Operating Officer	443,700	25,354	-	532,439	0.009
12. Ms. Ounruen Sujarittham	Senior Finance and Investor Relations Manager	-	-	-	-	-
13. Ms. Rewadee Ardham	Senior Accounting Manager	969,375	55,392	1,000,000	163,249	0.003
<b>Total as at December 31, 2018</b>		<b>Including shares held by LTD. KPK 1999</b>			<b>1,868,459,026</b>	<b>30.32</b>
		<b>Excluding shares held by LTD. KPK 1999</b>			<b>124,517,895</b>	<b>2.02</b>

Noted: (1) The acquisition of the above shares by means of trading in the securities market and the stock dividend.

(2) KPK 1999 Co., Ltd. is the company of which 50.50% shares are held by Mrs. Paichit Rattananon, Chairman.

#### ● Communication Channels to the Public

The Board of Directors recognizes the significance of correct, complete, timely, transparent, and thorough information disclosure, and assigns Mr. Pasit Leesakul, Chief Executive Officer, Ms. Pavita Leesakul, Vice President, Corporate Affairs Division and Ms. Ounruen Sujarittham, Senior Finance and Investor Relations Manager and Company Secretary, as focal points of investor relation to communicate with investors, shareholders, analysts, media, and other organizations concerned. Investors can access all information relating to the Company by contacting the Investor Relations Department as follows;

Name	Position	telephone	E-mail Address
1. Ms. Ounruen Sujarittham	Senior Finance and Investor Relations Manager and Company Secretary	+66 2022 7777 # 3201	ounruen@trc-con.com
2. Ms. Pachara Srivichupong	Finance Supervisor and Investor Relations	+66 2022 7777 # 3213	pachara.s@trc-con.com

In 2018, the Company constantly communicated and provided information to analysts, investors, shareholders, and media in various forms as follows:

1. Participate in the Opportunity Day hosted by The Stocks Exchange of Thailand for 2017 operations results and 1<sup>st</sup> to 3<sup>rd</sup> quarters of 2018.
2. Post information relating to investors relations on TRC's website, under "Investors Relations", such as the securities analysis report on TRC, public relations news, news / magazines articles relating to interviews of TRC management executives and video clip of the activities at the Opportunity Day
3. Provide opportunity for securities analysts from various securities companies to meet (Company Visit) the management of the Company and subsidiaries.

#### List of Securities Companies which participate in "Company Visit" activities in 2018

- Country Group Securities Plc	- Yuanta Securities (Thailand) Co., Ltd.
- Maybank Kim Eng Securities Mutual Funds (Thailand) Co.,Ltd.	- The Brooker Group Plc
- UOB KayHian Securities (Thailand) Plc	- Kasikorn Securities Plc
- KGI Securities (Thailand) Plc	- ASL Securities Co., Ltd.
	- Globex Securities Co., Ltd.

#### ● Financial Statements and Auditors

The Company and Sahakarn Wisavakorn Co., Ltd. have appointed EY Office Limited as auditors in 1999 and 2007, The appointed auditors were the independent ones whose qualifications were accepted and approved by the Securities and Exchange Commission.

In 2017, the Company had no past record of being ordered to amend the financial statements by the Securities and Exchange Commission and the Stock Exchange of Thailand and also no record of delay of both quarterly and yearly submission of the financial statements.

#### 5. The Directors' Responsibilities

The Board of Directors consists of knowledgeable and capable individuals who play an important role in determining the Company's policies on finance and risk management as well as overall direction. They also have a vital role in independently supervising, auditing, and assessing the corporate performance as well as the performance of each individual high-level executive to meet the plan.

#### ● Vision, Mission and Strategies

The Company's Board of Directors has a policy to review the Company's vision, mission statements and business strategies every year. In 2018, a Corporate Strategy division which reports directly to the Executive Committee was established to foster joint-participation between the management and employees in setting corporate objectives and strategies, implementation them, and evaluate the results to see if they meet the specified targets. The Board of Directors (at the 7/2018 Board's meeting held on November 12, 2018) reviewed and approved the vision, mission statements and objectives for the next 3 years and the definition of the new organization as shown in the topic "Management Structure" which the Company has publicized to the employees and disclosed on the Company's website under "About us / Vision / Mission / Objectives".

Furthermore, the Company's Board of Directors has a policy to allow the management to propose annual corporate objectives to the Board of Directors for approval. This involve setting of corporate performance index to measure various activities, such as value of new projects received during the year, number of new clients, level of clients' satisfaction. Weighted scoring system and criteria for assigning points for each category being evaluated will produce an average score for the evaluation. The Board of Directors has assigned the management monitor to see if the corporate strategies are being implemented, conduct an evaluation, and report the results to the Board of Directors. The results of the evaluation will be used in conjunction with other factors to review if the corporate vision, mission and objectives are still appropriate. This will also help justify the increase of salaries and annual bonuses, as well as a reference for setting corporate goals for the following year.

- **Structure and qualifications of the Board of Directors and Directorship in other company**

The Board of Directors consist of 9 members who meet the required qualifications and do not possess prohibited characteristics under the Public Company Limited Act. The Board should comprise persons with a variety of skills and expertise, regardless of gender. The Company has clearly separated positions between Chairman of the Board of Directors and Chief Executive Officer. The composition of the Board of Directors consists of four independent directors, representing more than one-third of the entire Board. This contributes to proper checks and balances and crosschecking of management.

The recruiting and appointing of Company's directors must go through the consideration and review process of the Remuneration and Nomination Committee. In each year, not less than one-third of the directors must step down in accordance to their tenure. The Company requires that each director is a Board member of not more than 5 listed companies. The Chief Executive Officer must report to the Board if a director serve as an Board member in another company. As of 2018, the structure of Board Directors will be reviewed annually, via the Skill Matrix to consider the work skills and work experience of each director. In 2018, the Board of Directors felt the directors have diverse skills and work experience which are beneficial to the Company's business operations. However, in compliance to the good corporate governance code and principles, the Company has to recruit an additional independent director in order to maintain the proportion of independent director at over 50%.

No directors serve as Board member in more than 5 listed companies in accordance to the recommendations of The Stock Exchange of Thailand and the policy of the Company / subsidiaries. Details of each director have Board member post in other companies are shown in the "Board of Directors and Executives"

- **Segregation of the Chairman of the Board of Directors and the Chief Executive Officer**

The Chairman of the Board of Directors is not the same person as the Chief Executive Officer. The duties and responsibilities of the Chairman of the Board of Directors are clearly specified under "Management Structure". The Chairman of the Board of Directors is Mrs Paichit Rattananon, who is a representative of the shareholders, and is not an independent director.

The Company's Chief Executive Officer is Mr. Pasit Leesakul

- **Tenure of Independent Directors**

Members of the Board of Directors are appointed by the shareholders at the shareholder's meeting. The tenure of independent director is in accordance to the Company's mandates. Independent directors may be re-appointed after their terms as Board member expired. Even though the Company has 3 independent directors with over 9 years of service as Board members, the Company has no policy to limit the number of years an independent director may serve as a Board member if they continue to possess the skill, knowledge and work experience which are beneficial to the Company's business operations, have personal interest which is not in conflict with the interest of the Company, make decisions based the best interest of the Company and operates independently of the management and major shareholders.

- **Orientation for New Directors**

The Company has prepared video to introduce the Company and its subsidiaries, major projects, business operations during orientation session for new directors and the general public. This video is also available on the Company's website under "Company's news/videos". Furthermore, the Chief Executive Officer will brief new directors about the Company / subsidiaries scope of business via slides presentation. The Company's human resource division also uses these videos and slides to present the Company information to new employees.

- **Self-assessment of the Board of Directors**

The Board of Directors set up the policy requiring all directors to conduct assessment of the performance of the entire Board of Directors using the self-assessment form for the Board of Directors provided by the Corporate Governance Development for Capital Market Department, Stock Exchange of Thailand. For 2018, the Company used the form issued in February 2015 and updated information about the Company for each topic with the additional information for certain topics to support the assessment of the directors. There are 6 major topics for assessment:

1. Structure and qualifications of the Board of Directors
2. Role, duties and responsibilities of the Board of Directors
3. Meetings of the Board of Directors
4. Performance of Duties as Director
5. Relationship with management
6. Directors and management development

In addition, the performance of each Board director and directors of 4 subcommittees (Internal Audit Committee, Remuneration and Nomination Committee, Corporate Governance committee, Risk management Committee) will be evaluated in 3 categories - 1. Structure and qualifications 2. Meeting 3. Roles, duties and responsibilities. The overall score earned from the performance evaluation of the Board of Directors, the individual director and the subcommittee directors will be shown to all the directors to serve as reference for correcting deficiencies and making improvements. For 2018, the performance evaluation results showed the Board of Directors received an overall score of over 90%.

- **Performance Appraisal for Chairman of Executive Committee and Chief Executive Officer**

The Board of Directors assigns the Remuneration and Nomination Committee to handle the performance appraisal for Chairman of the Executive Committee and Chief Executive Officer on annually basis and also determine the annual remuneration for him prior to proposing the appraisal result for consideration of the Board of Directors Meeting for approval of his remuneration annually.

- **History of Misconduct against the Regulation of the Stock Exchange of Thailand and the Securities and Exchange Commission**

The Company has no record of misconduct against the regulation of the Stock Exchange of Thailand and the Securities and Exchange Commission.

- **Sub Committees**

The Company's Board of Directors has appointed a number of directors from the Board and executives to serve as subcommittee directors. The Board of Directors established 6 subcommittees - Internal Audit Committee, Remuneration and Nomination Committee, Corporate Governance committee, Risk management Committee, Executive Committee and Management Committee (which was dissolved in 2019) to handle specific tasks. The scope of authority and responsibilities of the subcommittees are clearly specified in writing and disclosed on the Company's website and in the Company's annual report. The subcommittee has the authority to request the management to attend meetings to clarify issues, or to prepare reports and/or hire a consultant to provide recommendations as deemed appropriate.

The Board of Directors has approved the use of a handbook which serves as a reference on the scope of authorization for managers and supervisors at various levels in the organization. This serves to decentralized authorization to improve operations efficiency, minimize potential risks, and create a standardized system which is in compliance with the Company's internal controls framework. This handbook will be reviewed regularly and revised if necessary to fit changing operating environment.

- **The Audit Committee**

The Audit Committee consists of 3 independent directors whose qualifications are in line with the criteria of the Stock Exchange of Thailand and the Securities and Exchange Commission in which the proportion of share holding of the independent directors was set not less than 0.75% more strictly than 1% as set by the Securities and Exchange Commission's regulations

Since 2015, the Company hired EI Business Advisory Co., Ltd. to perform duties as the internal auditor in place of the Internal Audit Department. This is to facilitate independence in performing duties and allows the auditor to report directly to the Audit Committee.

- **The Remuneration and Nomination Committee**

The Remuneration and Nomination Committee comprised of 6 directors - 4 independent directors, the Chief Executive Officer and an executive director. These directors are responsible for recruiting directors and consider the remuneration for the Board of Director and the Chief Executive Officer. In 2018, there were 3 meetings to consider the framework for increasing the salary and bonus for the Company and subsidiaries for 2017 and 2018; and to consider

the salary and bonus (2019) for the Chairman of the Board of Directors and the Chief Executive Officer; and to select a director to replace another director whose tenure has expired; and to select another director to replace the director who resigned. The selected director must have the required qualifications, work skills, specific expertise and experience which would benefit the Company's business operations. The Remuneration and Nomination Committee also reviewed the Charter of the Remuneration and Nomination Committee.

- **Corporate Governance Committee**

The Corporate Governance Committee comprises of 2 independent directors and 2 management executives. They are responsible for overseeing the Company and subsidiaries' operations to be in compliance to the Good Corporate Governance Code and principles. In 2018, the Corporate Governance Committee held 1 meeting to review the plan and summary of the Corporate Social Responsibility (CSR) 2018 operating results, acknowledge the publicly listed companies' corporate governance survey results for 2018, and acknowledge the Corporate Governance Report (CGR) criteria for 2017 which are being undertaken / not yet undertaken, including the review of the Charter of the Corporate Governance Committee Charter, and reviewed how the Company and subsidiaries performed with regards to compliance to the Securities Exchange Commission (SEC) and The Stock Exchange of Thailand (SET) listed firms Corporate Governance Code (CG Code) 2017 guidelines. The Company and subsidiaries will address the areas which are still not in full compliance with the CG Code within the appropriate time frame to fulfill all the requirements / obligations.

- **Risk Management Committee**

Risk Management Committee consists of 2 independent directors and 2 executive directors to perform their duties in relation to risk management. In 2018, the committee held 2 meetings to do the following:- to acknowledge the overview of risk management; to approve the risk management plan and the preparation of annual report only the part relevant to risk management; and to review the Risk Management Committee Charter. In addition, there has been the appointment of the Risk Handling Sub-Committee and the Risk Task Force assigned with duties to perform and manage risk-related tasks in accordance with corporate policies, vision and strategic plan and to conduct the assessment of risks in varied dimensions.

- **Executive Committee**

Executive Committee consisting of 4 executive directors which are responsible for developing plans, policies, direction, business strategies, and management structure for the Company's core business operation; considering the Company's performance in terms of profit/loss, and the interim or annual dividend payment before proposing it to the Board of Directors; and performing other tasks as assigned by the Board of Directors.

- **Management Committee**

The Management Committee consists of independent directors, management executives, expert advisors / specialists from various fields, totaling 10 individuals. Their responsibilities is to oversee the day-to-day operations of the Company and other issues as assigned by the Board of Directors. However, in January 2019, the Board of Directors resolved to dissolve the Management Committee and amend the scope of authority and responsibilities of the Executive Committee to include the duties and responsibilities of the Management Committee. The Board of Directors also approved the handbook (January 2019 edition) on authorization authority and

implementation authority in order to replace the Management Committee's authorization authority with that of the Executive Committee.

- **Directors' Report**

The Company's Board of Directors is responsible for the Company's financial statements prepared in accordance with the generally accepted accounting standards, and responsible for ensuring the adequate disclosure of significant information in the notes to financial statements. The Board of Directors appointed the Audit Committee, all of which are independent directors, to oversee the quality of the Company's financial reports as well as the internal control system. The Audit Committee's opinion toward such reports and the internal control will be disclosed in the Annual Report's "Report of the Audit Committee" section. Report on the Board of Directors' responsibilities for Financial Statements is to be proposed to the Board of Directors meeting and disclosed in the Annual Report as well.

- **Succession Plan**

To prevent the potential detrimental impact on the Company's business operation, the Board of Directors has approved the policy on the nomination of Chief Executive Officer and the policy on succession of executive positions in case of emergency or retirement.

- **Directors and Officers Liability Insurance (D&O)**

The business expansion, diverse types of business and transactions which TRC Group engages in today exposes the directors and officers to potential business related risks which can arise as they perform activities, engage in transactions, enter into contractual agreements/ obligations on behalf of the Company and subsidiaries. They expose to potential lawsuits from outsiders, shareholders, stakeholders/ vested parties. Hence, the Board of Directors have instructed the management to consider obtaining the Directors and Officers Liability Insurance (D&O) which specify the terms/conditions, the amount of insurance and premium and propose it to the Board of Directors for review every year to ensure it is adequate to protect the directors and officers from potential lawsuits and damage/loss claims as they perform their duties on behalf of the Company and subsidiaries as assigned. The D&O insurance will not cover illegal, or fraudulent actions by the directors and officers in which case the Company and subsidiaries are not liable for any damage, or loss caused by such action. The compensation for damage/loss will have to be sought by the victim from the director/officer who committed the illegal act.

- **Balance of Power for Non-executive Directors**

As of December 31, 2018, the Company's Board of Directors consists of nine directors including:

- |   |           |
|---|-----------|
| - Chairman, representative from major shareholder | 1 person  |
| - Independent directors                           | 4 persons |
| - Executive directors                             | 4 persons |

- **Remunerations for Directors and Management**

The Remuneration and Nomination Committee proposes directors' remuneration and bonus to the Board of Directors Meeting to later propose to the Annual General Meeting of Shareholders for approval including to propose the remuneration of Chairman of Executive Committee



and Chief Executive Officer for approval by the Board of Directors Meeting. The remunerations was passed the resolution of the committee in term of appropriateness in comparison with other listed companies. The Company's remunerations for directors are in a form of monthly payment, meeting fee and bonus. The management's remuneration will be in accordance with the principle and policy as set by the Board of Directors and in relation to the Company's operating performance and corresponding to their responsibilities.

#### ● Directors and Management Development

It is the corporate policy to encourage and support directors and management to take courses and seminars on a regular and ongoing basis in order to improve their knowledge that could be applied to their jobs and lend to greater work efficiency e.g. a variety of courses organized by the Thai Institute of Directors, the Office of the Securities and Exchange Commission, the Stock Exchange of Thailand, the Thai Listed Companies Association, the Thai Investors Association and other independent organizations.

In view of communicating the Company's policies, goals, business direction and strategies, the Company has been holding a meeting or workshop seminar, at least once a year as required by policy, specifically for the Company's directors, in which guests with direct, extensive experience were usually invited to be the co-speakers/instructors.

The Company Secretary is responsible for presenting to the Board all announcements, rules and regulations of the Office of the Securities and Exchange Commission, the Stock Exchange of Thailand and other agencies that the Board needs to know, including news about seminars and/or activities that could contribute to a success in the fulfillment of directorship duties.

In 2018, director and executive participation in the training courses and seminars are as follows:

- Mrs. Paichit Rattananon – the Chairman of the Board of Directors participated in the course, “Managers High Level Judicial Process” Class 23 at the Judicial Training Institute
- Mr. Samai Leesakul – Director and Chairman of Executive Committee participated in the course, Cryptoasset Revolution (class 1 at the Thai Fintech Association and ICORA Co., Ltd.
- Ms Pavita Leesakul – Director and Vice President of Corporate Affairs Division participated in the course, Director Accreditation Program (DAP) Class 151/2018 at Thai Institute of Directors
- Mrs. Podchanee Phaosavasdi Director and Chief Commercial Officer participated in the following seminars:
  - o Thai construction with Thailand 4.0 Thai Contractors Association Under H.M. The King's Patronage
  - o Business alliance PTT (2018) Vice-President of Engineering and Project Management (EPM SRM Supplier Relationship Management) hosted by PTT Plc
- Ms Rawadee Arjharn – Senior Accounting Manager participated in the seminar, Strategic Financial Leadership Program (SFLP) hosted by the Thai Listed Companies Association

Having recognized the importance of self-development of the Company's directors and executives, the Company has organized training courses and programs for directors and executives, most of which were led by the instructors who are specialists in particular fields and were specifically hired by the Company to cultivate necessary knowledge and skills that the

directors and executives could apply to their management tasks and prepare the organization for the incoming growth.

- **Board of Directors Meeting**

The Company determines meeting schedules for the Board of Directors and other subcommittees in advance annually. Meetings of the Board of Directors and the Audit Committee must be held at least once per quarter. Special meetings may be convened as deemed necessary. The Chairman of the Board of Directors shall manage the performance of duties of directors, and shall provide a summary of the meeting agenda to directors for consideration. Each director shall be allowed and encouraged to express opinions freely and meeting time shall be allocated appropriately and efficiently. The Company Secretary helped in preparing the agendas for the Board of Directors' meeting, the invitation letters to attend the meeting and the supporting documents / materials which will be mailed / delivered to the directors at least 5 working days prior to the Board of Directors meeting date, organize the meeting, store / file the documents related to the meeting and provide advice to the Board of Directors to ensure compliance with the various related laws, rules / regulations, mandates, including brief the Board members about any announcements, various rules / regulations and courses / seminars with related organizations which would benefit them.

The Board of Directors' policy is to encourage each director to attend the Board meeting regularly, at least 80% of the number of times the meetings are held during the year. In 2018, most of the Board members attended all the meetings, with only 2 directors who did not attend the meeting once out of the total of 7 meetings due to other obligation. The meeting attendance records of each member of the Board and subcommittee are disclosed under the topic "Management Structure". The Board also has a policy to allow independent directors to attend meetings together at least once a year without the presence of the executive and the management. In 2018, such meeting of only independent directors was held in November.

The Company and subsidiaries added the followings requirements pertaining to good corporate governance:

- As of 2010, meeting between independent directors and accounting auditor (only), without the presence of management executive, or the management, of at least once a year is required. In 2018, such meeting was held in February.

- As of 2014, the passing of the Board's resolution for each Board of Directors' meeting requires the presence of at least two-third (2/3) of the total number of directors.

- As of December 2018, the agenda pertaining to the report involving a director with vested interest must be placed first on the list of agendas for the Board of Directors to consider every time. The director with vested interest must not be present at that particular Board meeting which his/her vested interest issue being reviewed by the Board of Directors.

- **Company Secretary**

Since 2007, the Board of Directors has appointed Ms. Ounruen Sujarittham, Senior Finance and Investor Relations Manager, as Company Secretary with duties to facilitate the preparation of meeting agendas and invitations to meeting, organize meetings, keep records relevant to meetings and conflict of interest reports made by directors and management, give advice in relation to the Board's duties to comply with law, relevant rules and regulations, and oversee the disclosure of information and all compulsory reports to the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.

# 11. Social Responsibility

The Company believes in the importance of social responsibility and preservation of the environment. The Company ensures its business operations to not cause negative impacts on neighboring communities and the surrounding environment. Moreover, the Company also organized social activities to enhance positive corporate image which will boost public confidence in the Company.

The Company divides its corporate social obligations into the following 2 parts - corporate social responsibility in-process and corporate social responsibility after-process:

## 1. Corporate social responsibility for work in-process (CSR-In-Process)

The Company's core businesses comprise of services for the energy and petrochemical industries relating to pipeline and process plant construction, machinery installation, project development and investment, civil and infrastructure construction. The Company gives priority to safety concerns and environmental impacts during and after construction work operations which may affect residents in the surrounding communities, such as safety of project work sites, garbage disposal, treatment, pollution control measures, attentive potential adverse impacts on surrounding communities, increase social responsibility awareness to ensure appropriate actions towards society while fulfilling obligations to the client in producing quality work within the specified timeframe; as follows:

- **Acceptance of assigned project**
  - **Site of construction project:** Initially, the Company will assess the potential negative impacts on the surrounding communities / residents, and legal aspect pertaining to the ownership of the project construction site, obtain permission from the site owner and all the related agencies before undertaking construction activities.
  - **Secure suppliers for materials and equipment:** The specifications and quality of all types of construction supplies must pass inspection by the project owner's quality control division to ensure it meets the specified requirements before it can be used in the project. The suppliers and subcontractors will be evaluated by the Company's supplies and logistics division management team regularly every 6 months as basis for future procurement consideration. The materials / equipment and services suppliers will be evaluated by an evaluation form which includes topics on occupational health, safety standards and compliance with related environmental regulations. The Company will provide new suppliers and subcontractors with guideline information regarding the Company's policy pertaining to compliance with occupational health, safety and environment standards and regulations.
  - **Employment:** residents of surrounding communities can apply for jobs at the construction project site.

- **Construction works in-progress**

- The Company has a public relations team to provide information to surrounding communities' residents with regards to potential impacts from the project construction activities and the benefits after the project is completed. The Company is ready to promptly resolve any adverse impact, or problem caused by the construction project on the communities. Furthermore, the Company has established channels (i.e. website, telephone number, or directly through assigned project site staffs) for communities' residents, or the public to voice their complaints.
- The Company arrange traffic route to ensure smooth traffic flow at the construction project site and to minimize inconvenience to residents of the surrounding communities. Deliveries of construction supplies and materials are scheduled at appropriate times to lessen interruption to local residents.
- The Company provides handbook which serves as guidelines of work safety issues and safety measures training for related staffs before construction activities commence.
- Set the design and format of the construction project to ensure safety at the work site in accordance to the requirement of safety regulations.

- **Delivery of completed project**

- The Company provides warranty on the completed and delivered construction project according to the agreed and specified time frame
- After the construction project has been fully completed, the Company will restore the project site and landscape to its original state before delivering the finished project to the client.
- A client's appraisal form to rate the Company's performance after delivering the fully completed work can help indicate the level of satisfaction the client has in the finished project, and serve as reference for improving work efficiency and quality improvements on future projects.

### **Overall Policy and operations**

The Company has specified corporate mission statements to serve as guidelines for all employees to follow. One of the mission statements is "We shall operate our business operations with social and environmental responsibility". Furthermore, the Company stresses the importance of "C = Commitment" which signify the commitment to produce quality works, to maintain safe working environment at all times and to preserve the environment. In 2018, the Company announced its corporate policy on "Quality, stability, safety, occupational safety and health, environment and social responsibility" and disclosure on the Company's website under the topic of "About Us" / "QSSHE Policy" to encourage strong participation and commitment from every division of the Company. As part of its obligations to society and stakeholders, the Company remains strongly committed to social development and environmental preservation activities.

The Company adhere to the 8 corporate social responsibility (CSR) principles of The Stock Exchange of Thailand as follows:

## 1) Ethical and fair business practice

The Company set guidelines for ethical and fair business practice in accordance to Corporate Governance handbook (January 2017 version / section 3). The followings are 12 categories of ethical and fair business practice guidelines:

Category 1	Respect human rights and labor laws	Category 7	Disclosure, storage, use of internal / confidential information
Category 2	Occupational health, safety and environmental measures 2.1 Health & safety of workplace 2.2 Environmental preservation	Category 8	Treatment towards business rivals
Category 3	Vested interest and conflict of interest	Category 9	Treatment towards clients
Category 4	Receiving / giving of gifts, assets and hosting of reception	Category 10	Treatment towards trading partners, and / or lenders
Category 5	Anti-fraud / corruption	Category 11	Information technology, intellectual property assets, or rights
Category 6	Engaging in political affairs	Category 12	Treatment towards employees

## 2) Anti-fraud and corruption

The Company announced its anti-fraud and corruption policy (approved by the 6/2016 Board of Directors meeting held on August 11, 2016) to the management and employees at every corporate level. The anti-fraud and corruption mandates are specified in the Company's Corporate Governance handbook (January 2017 version) under section 4 – "Anti-fraud and corruption policy". The handbook contains sub-topics comprising of definition, policy, duties / responsibilities, procedure guidelines, measures, channel to report wrongdoings, suggestions, file complaints. The Company's website also contains information on the Company's anti-fraud and corruption policy. This is to ensure the Company's business operations and activities are in strict compliance to the applicable laws and regulations, is transparent and ethical.

In 2018, the Company did not receive any complaints, or information relating to fraud, or corruption.

## 3) Respect for human rights and 4) Fair labor practice

The Company operates business with respect to human rights by avoiding activities which abuse human rights, treat workers fairly, promote equal rights between men and women. Furthermore, the Company regularly employ people with some disabilities. This guideline on respect for human rights and labor is covered in section 1 of the Company's handbook on corporate governance.

## 5) Responsibility to consumers

The Company is aware of providing efficient services, timely delivery, meeting the needs of every customer, and compliance with the highest standard of safety are at the heart and center of business undertakings. This guideline on treatment towards clients is covered in section 9

The Company has undertaken Customer Satisfaction Survey every 6 months or at the end of project, as the case may be. The survey questions can be divided into 10 topics as follows: (1) disclosure of information before job acceptance, (2) communications, (3) availability of supporting documents, (4) coordination and speediness in solving problems, (5) timely delivery, (6) fulfillment of work requirements, (7) safety-in-process practices, (8) environmentally friendly practices, (9) after-delivery services, and (10) pricing. The survey results and opinions of the customers will be sent to the management for further use as a guideline to develop and improve services that better suit the customers.

#### **6) Environmental protection and 7) Participate in community and social development**

The Company gives importance to environmental preservation, communities and social development as specified in the Company's handbook on corporate governance. section 2 pertaining to occupation health, safety and environment. The Company's aim is to instill sense of awareness and participation among the employees to help preserve the environment while performing their job duties. The Company assess impacts on society, communities and the environment with its trading partners, clients and vested parties prior to establishing the work process and appropriate preventive measures in a cost effective manner to achieve maximum benefits for the organization.

#### **8) Innovation and distribution of CSR innovation**

- No information available -

#### **Business activities detrimental to corporate social responsibility**

In 2018, the Company and subsidiaries were not subject to any investigation by related authorized, nor did TRC Group violated any related laws / regulations pertaining to social responsibility in accordance to the 8 principles of The Stock Exchange of Thailand.

## **2. CSR-After-Process**

In 2018, the Company and its subsidiaries conducted the following CSR-After-Process activities.

#### **1) Activities to promote development and education for children and youths**

The Company participated in the National Children's Day activities at the Praruang Prasit Nursery School, located near the head office. The Company donated school equipment supplies, provided gifts for the students / children residing in the Or Ngoen Community Housing and extend morale support to the children who will grow to be valuable human resource for the country in the future.





## 2) Blood donation activities

The Company and Sahakarn Wisavakorn Co., Ltd. have been hosting annual blood donation twice a year (in February and September) since 2008. Employees and residents in surrounding communities are welcomed to donate blood. In 2018, 103 bags of blood were collected and donated to Rajavati Hospital.



## 3) Donations of various items for charitable causes

- Old books, magazines and calendars were donated to the Education Technology for the Blind Center, as it can be used to make braille books for distribution to various agencies related to helping blind people nationwide.
- Donate several items (i.e. garments, shoes, toys, dolls, old electrical appliances) to the Phradabos Foundation via the Big Cleaning Day.
- Donate computers / accessories and unused electrical appliances to The Mirror Foundation under the “Computer for the Young” program to support education for youths in remote parts of the country.



- The “Green Roof” project – delivery of unused beverage cartons to Big C Supercenter Plc (Don Muang branch)’s representative to be recycled into roof sheets. This “Green Roof” project and of Princess Pa Foundation promotes the recycling of unused materials into materials which can be used for other purposes.





- Donate 10 wheelchairs to the Thai With Disability Foundation to lift morale, improve quality of life and opportunities for the disabled in our society.



#### 4) Sponsorship of drinking water as part of participation in community development activities and other important events

- The Company sponsored more than 4,000 bottles of drinking water to the Bangkokhen District Office for use in the community development activities ranging from medical, dental, veterinary service, occupational skills development and low-priced consumer goods”



- The Company, together with PTT Plc, Khun Payoong Chiangthong the Head of Chaom Tambon Administrative Organization, Khun Tawatchai (acting village head of Moo 100 Chaom subdistrict) and volunteering local residents participated in activities at a Buddhist temple “Wat Bumrunghtham” in Kaeng Khoi District of Saraburi province. The activities involved sweeping of the temple grounds and painting of the walls surrounding the temple. The Company’s team of volunteers from the head office then proceeded to visited the PTT Block Valve 4.19 project in Saraburi province which TRC was the contractor.



## 5) “Back to Hometown 2018” Program

“Back to Hometown” is intended for the Company to take part in the improvement of local community and life quality of residents living in the staff’s hometown. In addition to contribution to social development, this program, which has been undertaken continually since 2003, has also brought pride to the Company’s staff that they are part of the effort in the betterment of their hometown community. In 2018, the Company funded 2 initiatives under this program as follows.

### ○ Sponsorship of water filter devices in Satul province

The Company provided free drinking water which was a part of the annual “Back to Hometown” program for 2018 for the Koh Raya Tod Yai community located in Koh Sarai Sub-district, Muang District of Satul province. The Company’s staff (Khun Anond Pitisaiphon) presented the details of the activities. The “Back to Hometown” program is an annual event to improve the quality of life in the employees’ hometown in line with the Company’s policy to operate business in a sustainable manner and giving back some of the profits to society.



- The Company delivered the water filter devices to the Barn Song Tarn School located in Mae Jaem district of Chiang Mai province. The Company’s staff (Khun Supasiri Somkid) presented details of the activities. This “Back to Hometown” program is an annual event to improve the quality of life in the employees’ hometown.



## 6) Social activities (disaster relief) activities

The Company is aware of the losses, damages and suffering brought by natural disasters, and does not hesitate to assist the disaster victims and lift their spirits. In 2018, the Company donated safety helmets via the Disaster Prevention and Maintaining of Peace and Order project of Tambon Hua Koon Jae municipality, Ban Bueng district of Chonburi province to promote on using safety helmets which can reduce the severity of damage from accidents.



## 7) Environmental preservation activities

- The Company organized the Go Green project to encourage employees to help reduce the amount of garbage by using personal drinking water containers when purchasing beverages.



## Safety, health and environmental management

The Company continues to develop employees' knowledge about safety, health and environmental laws and regulations and their capabilities in managing issues relating to safety, health and the environment.

### 1. Knowledge development

The Company continues to develop employees' knowledge about safety, health and environmental laws and regulations and their capabilities in managing issues relating to safety, health and the environment.

- 1.1. Training courses for employees on safety, health and environment standards - ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007, consisting of Internal Auditor course, Refresh for ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 courses.



- 1.2. Training courses for employees in compliance to related laws / regulations. Curriculum on safety for management level staffs, curriculum on safety for supervisory level staffs, curriculum on safety, health and working environment for general employees (6 hours), Occupational Health and Management System (OSHSM) curriculum for the safety, health, working environment committee.
- 1.3. Training course according to occupation - consist of courses on work safety (electricity related), basic course on fire extinguishing, course on working in poorly ventilated area, course on operating crane safely



Internal Auditor course



Refresh training course on ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007



Course on scaffolding



First aid training course

## 2. Creating motivation

To increase employees' awareness about personal and health safety in the workplace and preservation of the environment, the Company encourages top executives and the employees to participate in Company sponsored activities to promote safety awareness in the workplace in accordance to Company's policies, such as:

- 2.1. Organized tour for top management - upper management takes field trip to observe the Company's workplace safety, health and environmental management operations once each quarter.
- 2.2. Hosted activity to celebrate Man-hour Achievement Award to reward employees for completing job tasks safely without major accidents which can force suspension of work operations. The awards encourage employees to work attentively and cautiously, which contribute to safe working environment.



Top Management Tour activity



Man-hour Achievement Award activity

## 3. Operations Control

- 3.1. The Company has specified guidelines for each work function to ensure overall work operations safety and to reduce work related accidents to none (zero accident) and to minimize potential injuries and illness. The Company instructs employees to use / wear various safety equipment / devices / clothing to protect themselves when working in poorly ventilated areas, when operating heavy equipment, or working in high places. Other safety measures include, heavy equipment work permits, proper disposal of hazardous chemicals, physical check-up to ensure readiness before performing job tasks, alcohol level check, narcotics drug test.





Safety Talk



Blood pressure check before work

Alcohol level check

3.2. Other operations control activities organized by the Company as follows:

- “Friends help friends” activity – identify unsafe, or risky work operation and working environment at the workplace.
- Inspect, evaluate SHE Award activity – the QSSHE management division inspects and evaluates the project to find a role model project which has a well-managed safety, health and environment system in place in compliance to the ISO 14001:2015 and OHSAS 18001:2007 standards.



Present reward “Friends help friends” activity



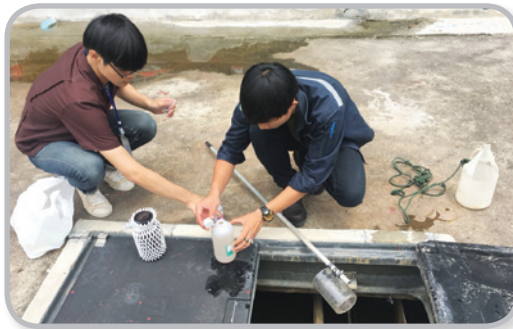
Inspect and evaluate SHE Award

#### 4. Environment management

The Company has set guidelines to ensure all operations (i.e. disposal of hazardous garbage, waste water by the project site, release of dust into the air) are in compliance with the laws and regulations and do not caused adverse impacts on the environment, the surrounding communities. Controls and preventive measures are in place to minimize release of hazardous materials, chemicals which can pollute soil, water and air.



Dust level inspection



Inspect condition of waste water



Spray water to curb dust pollution



Garbage disposal / storage



There are also activities to raise awareness about resources conservation and environmental preservation, such as:

- The “5-S activities” (or workplace tidy-up day) and the “Big Cleaning Day at the Company regularly every 6 months
- Activity to segregate garbage before disposal in to the bins and conduct regular garbage inspection without advance notification
- Activity to reduce electricity consumption, such as turning off the office building’s central air-conditioners at lunch time and replace regular light bulbs with LED type which consume less electricity. Monitor whether electricity consumption has declined after power-saving campaign was implemented.
- Manage water supply system by adopting the “2R” (Reuse & Recycle) which involves using waste water and water from fish ponds to water the plants / lawns around the office buildings, including waste water treatment system to improve water condition before releasing it to the public waste water pipelines.
- Participate in the “power-saving buildings” contest hosted by the Metropolitan Electricity Authority (MEA). The Company received an award and certificate for power efficient building which enhanced the social responsibility image of the Company.



- Project to reduce paper consumption – adopt the use of Enterprise Resource Planning (ERP) software to help manage documents. The Company was able to reduce paper consumptions and promote re-use of paper (use both sides of the paper) and minimize excessive use of tissue / toilet paper.

## 5. Legislation compliance

The Company stresses the importance of compliance to laws / regulations with regards to the management of safety, health and environment system. The Company assigned safety staffs, set up a committee on manage safety related issues / problems and organized training courses on safety as specified by the laws / regulations, including submission of report to the Department of Labor Protection and Welfare.

## 6. Customers requirement compliance

- 6.1. Compliance with specific regulations for each project work site, or type of work, such as performing work in high places, compliance with traffic signs manual.
- 6.2. The Company participated in supply chain management with the country's leading companies / organizations as follows:
  - Participated in the “Environment, Social, Governance (ESG)” and “Sustainability Performance Assessment” hosted by PTT Plc. The Company received the ESG award (very good level)
  - Participated in the PTT Plc’s “Green Industry” (GI) award with Rayong natural gas separation plant. The Company received a “Green Industry” award (level 3)
  - Participated in the Contractor Safety Management (CSM) of SCG Chemicals Co., Ltd. The Company received a 90% rating from the evaluation.



Photo of inspection and evaluation conducted by PTT Plc (ESG: Environment, Social, Governance seminar) that the Company received an award



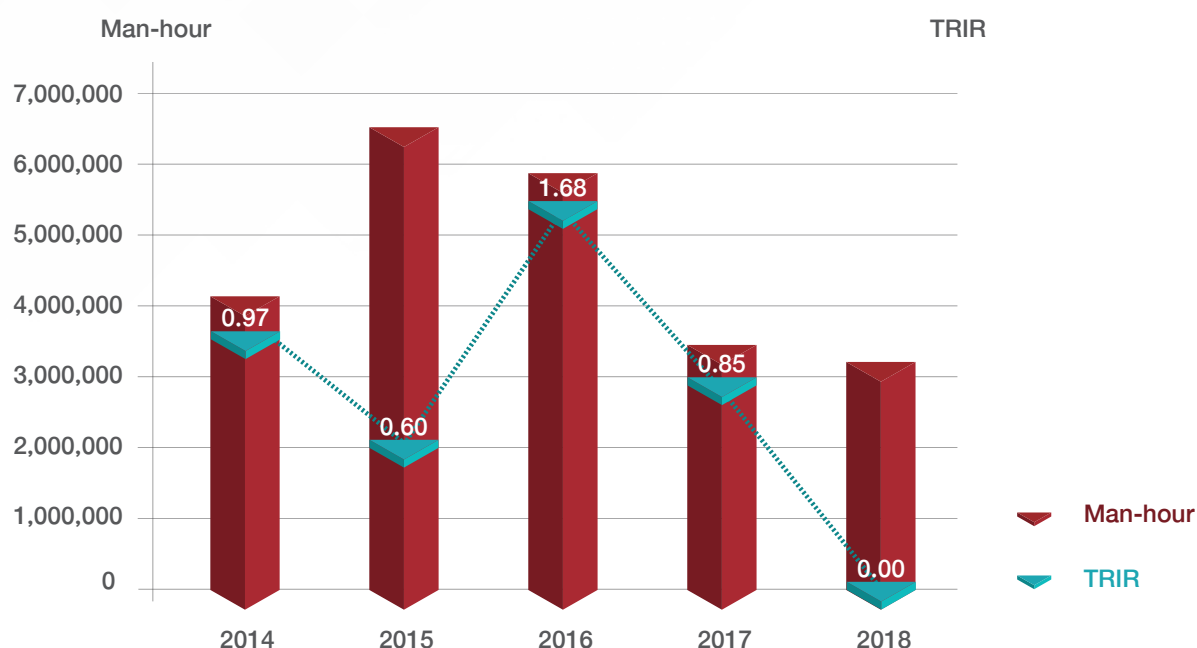
Photo of inspection / evaluation CSM (Contractor Safety Management) conducted by SCG Chemicals Co., Ltd.

## 7. Accident statistics

Comparison of accident statistics in the past 5 years showed the number of accidents have fallen to zero in 2018 while the total number of work related injuries (TRIR) also declined to zero

Year	2014	2015	2016	2017	2018
Man-hour	4,142,477	6,615,038	5,939,622	3,518,561	3,288,195
TRIR	0.97	0.60	1.68	0.85	0.00

Graph of Man-hour and TRIR data in the past 5 years



- Man-hour for year 2018 is from the period of January - October
- TRIR (Total Recordable Injury Rate): rate of work related injuries
- Recordable case – serious injuries from accidents requiring medical treatment
- $TRIR = (Recordable\ case \times 1,000,000) \div Man-hour$

## 8. Awards and certificates

8.1 On March 27, 2018, the Company received a certificate “MEA Energy Saving Building 2017” from the Metropolitan Electricity Authority



- 8.2 On June 13, 2018 the Company received the “Green Industry” award (Green system 3 level) for the integrated environmental management system with regular monitoring, results evaluation, review and continuing development from the Ministry of Industry



- 8.3 On September 7, 2018, The company received PTT Plc’s award for “Environment, Social, Governance (ESG)” and “Sustainability Performance Assessment” (very good rating)



- 8.4 On November 1, 2018, The Company received PTT Plc's "Green Industry Certified" award in conjunction with Rayong natural gas separation plant at the QSHE Day 2018 event





# 12. Internal Audit Control and Risk Management

## 1. Brief of the Board of Directors' comment towards sufficiency of the internal audit control system

The Board of Directors and the management have direct duties and responsibilities to provide and maintain the internal control systems in various areas including finance, operations, corporate governance, and risk management. The Board of Directors assigned the Audit Committee to have authority and duties to conduct reviews to ensure that the Company and Sahakarn Wisavakorn Company Limited have correct and adequate financial reporting, that internal control and internal audit systems are appropriate and effective, that risk assessment and risk management are appropriate, and that laws on securities and stock exchanges as well as regulations of the Stock Exchange of Thailand and relevant business laws are complied with.

EL Business Advisory Co. Ltd. is the appointed internal auditor for the Company and Sahakan Engineer Co., Ltd. with duties and responsibilities to conduct accounting audit of the entire business operations and provide independent evaluation report of the internal control systems of various function of the Company and Sahakarn Wisavakorn Co., Ltd. in accordance to the audit process and ensure the Company and Sahakarn Wisavakorn Co., Ltd. abide by the applicable rules / regulations. The internal auditor will prepare audit reports highlighting the relevant issues discovered, the objectives and scope of the audit, the audit procedures, provide recommendations and appropriate actions taken by the divisions which were audited; and submit the audit reports to the Audit Committee at the scheduled meetings. The auditor will then monitor to ensure whether the problems / deficiencies found are being resolved / rectify accordingly as recommended by the internal auditor.

The Audit Committee attended a meeting with the internal auditor to assess the adequacy of the internal control systems of the Company and Sahakan Engineer Co., Ltd. for 2018 in accordance to the internal control systems assessment form of the Office of the Securities Exchange Commission. The assessment report was submitted to the 3/2019 Board of Directors' meeting held on February 25, 2019. The Board of Directors reviewed the adequacy of the internal control systems of the Company in accordance to the 5 components of COSO (The Committee of Sponsoring Organizations of the Treadway Commission) framework as follows: control systems within the organization, risk evaluation system, operations controls system, information and communication system, monitoring system.

The Board of Directors was of the opinion that the Company and Sahakarn Wisavakorn Company Limited had appropriate and adequate internal control activities and mechanisms to ensure that business operations comply with related business objectives under applicable laws and regulations, helping prevent the management's misuse or unauthorized use of assets.

## 2. Internal control system of the Company

The Company has hired EI Business Advisory Company Limited to be independent internal auditor with duties and responsibilities to audit the operations of various functions as well as to prepare report(s) to be proposed to the every Audit Committee meeting. The Audit Committee jointly considered internal audit reports together with the independent internal auditor to provide recommendations for the improvement of internal control systems of the Company and Sahakarn Wisavakorn Company Limited. The Audit Committee is to conduct at least 4 meetings a year, to report audit findings to the Board of Directors meeting every quarter, and to prepare a report of the Audit Committee to the Board of Directors for consideration and for disclosure in the Company's annual report.

### Audit findings for 2018

EY Office limited, the certified public accountant of the Company and Sahakarn Wisavakorn Co., Ltd. identified audit findings and provided recommendations according to audit report called "Management Letter" 2018. The audit findings can be summarized under 4 topics: realized revenue according to the portion of work completed, realized project cost and the change in project costs estimation, realization of expected loss from construction works in accordance to the contract and preparation of various contracts to support the accounting audit, or tax audit by the Revenue Department pertaining to transactions involving related company with regards to setting of transfer price.

## 3. Head of the Company's Internal Audit

EL Business Advisory Company Limited was appointed as internal auditor and the appointment shall be in effect on and since 2015 to date. Having considered the qualifications of EL Business Advisory Company Limited, the Audit Committee was of the opinion that it was well qualified to be the Company's internal auditor on the basis of their independence and audit experience. The management could use the unbiased recommendations of the experienced internal auditor to improve effectiveness of the Company's internal control systems.

The person appointed by EL Business Advisory Co. Ltd. to head the internal audit team

<b>Name:</b>	Mr. Suwit Chanamporn
<b>Education:</b> Master's degree	Faculty of Commerce & Accountancy, Chulalongkorn University
Bachelor's degree	Faculty of Law, Ramkhamhaeng University
Bachelor's degree	Business Administration (accounting), Assumption University
Certificate	Accounting auditor, Chulalongkorn University
<b>Professional certification:</b>	Certified Public Accountant (CPA) of Thailand
<b>Work experience:</b>	



**Current:**

Managing Director	EL Business Advisory Co. Ltd.
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**Previous:**

Assistant auditor	PricewaterhouseCoopers ABAS Ltd.
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Internal audit manager	IBM (Thailand) Co., Ltd. and IBM Corporation Co., Ltd. (U.S.)
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Senior director of internal audit division	UTAC Thai Co., Ltd.
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**Training:**

- COSO ERM
- Risk Management
- CIA Review curriculum project
- Quality accounting audit operations
- Prepare paperwork for anti-corruption in organization movement
- Review of process for following up on and monitoring of activities undertaken in accordance to strategic plans
- Orientation course for Chief Accountants focusing on financial reporting
- Thailand IFRS Conference
- Prepare accounting to suit the current business environment in accordance to the accepted accounting standards reports

In 2016, the Audit Committee appointed Ms. Rawadee Ardharn, Accounting Manager of the Company, as secretary to the Audit Committee.

The consideration, appointment, removal, or transfer of the internal auditor must be approved by the Audit Committee.

# 13. Connected Transactions

Since 2015, the Company undertook related party transactions with ASEAN Potash Chaiyaphum Public Company Limited (“APOT”). The Company entered into the aforesaid related party transactions on an arm’s length basis and in accordance with the requirements of the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission. The related party transactions were duly reviewed by the Audit Committee and were proposed to the Board of Directors for consideration and approval.

The nature and scope of interest in relation to the connected transaction can be concluded as follows:

1. There are 2 directors having the conflict of interest consisting of:
  - Mr. Smai Leesakul, Director and Chairman of Executive Committee of the Company, has the position in APOT as Director, Chief Executive Officer and Managing Director; and
  - Mrs. Podchanee Phaosavasdi, Director and Chief Commercial Officer of the Company, has the position in APOT as Director.
2. There has been normal business transactions between TRC and APOT as follows:

Details	2018 Income Statement (Baht)	Statement of Financial Position as at Dec 31, 2018 (Baht)	Necessity and reasonableness of the transaction
<b>1. TRC’s 5<sup>th</sup> Floor office building area rental by APOT</b>  <b>Profit and Loss Statement:</b> <ul style="list-style-type: none"> <li>- Office rental income</li> <li>- Office Service income</li> <li>- Electricity income (Baht 5.40/ Unit)</li> <li>- Chiller Charge at fixed rate of 312,000 BTU/month, Baht 0.10/ BTU</li> </ul>	618,000  1,236,000  162,070  442,080		<p>The Company has provided its building area to be rented by APOT;</p> <p>- 5<sup>th</sup> floor office building area rental = 450 sqm. for 3 years (December 1, 2014 - November 30, 2017) and renewal 3 years (December 1, 2017 - November 30, 2020) Office rental at Baht 100 per square meter, totaling Baht 45,000 per month and office service fee at Baht 200 per square meter, totaling Baht 90,000 per month.</p> <p>- 6<sup>th</sup> floor office building area rental = 130 sqm. for 6 months (March 1, 2017 - August 31, 2017) and renewal 3 years (September 1, 2017 - August 31, 2020) Office rental at Baht 100 per square meter, totaling Baht 13,000 per month and office service fee at Baht 200 per square meter, totaling Baht 26,000 per month.</p> <p>The Company received a notice on May 30, 2018 from APOT requesting termination of the building space lease on the 6<sup>th</sup> floor and service contract effective as of June 30, 2018.</p> <p><b>Reasonableness: The rental rate and service charge rate are equal to the rate which the Company charged to Sinopec-TRC JV (contract ended May 2017)</b></p>

Details	2018 Income Statement (Baht)	Statement of Financial Position as at Dec 31, 2018 (Baht)	Necessity and reasonableness of the transaction																				
- Other income	2,458,150																						
Statement of Financial Position:																							
- Accounts receivable-associated company		1,486,245																					
2. Promissory note (P/N loan)  Interest receivable (this loan item took place in February and March 2018 and APOT paid the principle amount of the loan in March 2018)	84,478		<p>During the first quarter of 2018, the Company extended Baht 13 million loan to APOT to support business operations at interest rate of 11.814% per annum</p> <table><tr><th>Loan date</th><th>Amount (Baht)</th><th>Interest rate</th><th>Repayment received date</th><th>Interest received (Baht)</th></tr><tr><td>2/27/2561</td><td>10,000,000</td><td>11.814%</td><td>3/23/2561</td><td>77,681</td></tr><tr><td>3/16/2561</td><td>3,000,000</td><td>11.814%</td><td>3/23/2561</td><td>6,797</td></tr><tr><td></td><td>13,000,000</td><td></td><td></td><td>84,478</td></tr></table> <p>On February 26, 2018, the Company’s Board of Directors approved promissory note for APOT with limit of Baht 20 million at minimum lending rate, or MLR of the bank which the Company has a credit line with, + 5%. APOT has repaid both the principal amount of the loan and the interest to the Company on March 23, 2018 and April 19, 2018 respectively.</p>	Loan date	Amount (Baht)	Interest rate	Repayment received date	Interest received (Baht)	2/27/2561	10,000,000	11.814%	3/23/2561	77,681	3/16/2561	3,000,000	11.814%	3/23/2561	6,797		13,000,000			84,478
Loan date	Amount (Baht)	Interest rate	Repayment received date	Interest received (Baht)																			
2/27/2561	10,000,000	11.814%	3/23/2561	77,681																			
3/16/2561	3,000,000	11.814%	3/23/2561	6,797																			
	13,000,000			84,478																			
3. TRC awarded Preparation and Refurbishment of the Decline Project from APOT			<p>In January 2016, the Company awarded Refurbishment of Existing Decline Project from APOT, work value of Baht 143.69 million, 11-month construction period. In July 2017, there was additional work of Baht 20.45 million bringing about total work value of Baht 164.14 million.</p> <p><b>Reasonableness: acceptance of construction contract project which is typical business of the Company</b></p>																				
Profit and Loss Statement:																							
- Construction services income	3,133,492		Construction services income recognized on the basis of percentage of completion (The third quarter of 2018, accumulated services income for this project was Baht 105.90 million)																				
Statement of Financial Position:																							
- Advances received from customers under construction contracts		-	In February 2016, the Company obtained advance payment of Baht 10,743,690 which will be gradually cut off to be services income (10% of each APOT’s payment).																				
- Accounts receivable - associated company		24,983,698																					
- Unbilled receivables		-																					
- Work during construction period		4,131,774																					

Details	2018 Income Statement (Baht)	Statement of Financial Position as at Dec 31, 2018 (Baht)	Necessity and reasonableness of the transaction
- Accounts receivable - retention under construction contracts		7,853,989	
<b>4. TRC got a Letter of Award of Turnkey Delivery of APOT Project Package 2. Surface Processing Plant and Facilities</b>			<p>In February 2016, the Company obtained the Letter of Award for Turnkey Delivery of APOT Project Package 2. Surface Processing Plant and Facilities, work value of USD 245.46 million and Baht 25,789.33 million. <b>Currently, APOT still could not secure project financing, thus could not sign the EPCC contract with the Company.</b></p> <p><b>Reasonableness:</b> Selection of a contractor for the APOT project for the Turnkey Delivery of APOT Project Package 2. Surface Processing Plant and Facilities portion has passed the bidding project process. The Company has proceeded in accordance with the proper procedures for recording connected transaction, whereby, the Company proposed the audit committee and the Company's Board of Directors in November 2015, to consider and approve the APOT construction project bidding which may take place in the future, even though undertaking of a project from APOT is a normal part of the Company business. But the work value is over Baht 30 million</p>
<b>4.1) 1<sup>st</sup> Limited Notice to Proceed for Early Works: Engineering and Site Preparation (As a part of item 4.)</b>			1 <sup>st</sup> LNTF dated May 3, 2016, work value of EUR 10.20 million and Baht 294.938 million or equivalent to Baht 711.36 million (Fx. rate was fixed at 40.8255 Baht/EUR)
<b>Profit and Loss Statement:</b>			
- Construction services income	13,286,422		Recognized services income on the basis of percentage of completion <b>(Accumulated construction services income was Baht 485.29 million)</b>

Details	2018 Income Statement (Baht)	Statement of Financial Position as at Dec 31, 2018 (Baht)	Necessity and reasonableness of the transaction
<b>Statement of Financial Position:</b>			
- Advances received from customers under construction contracts		-	In May 2016, the Company obtained Advance payment of Baht 71,135,810 which will be gradually cut off to be services income (10% of each APOT's payment) <b>There was no figure for retention (or advance payment) received as of the end of 2<sup>nd</sup> quarter 2018 because the retention received balance figure was used to offset the overdue payment for work completed.</b>
- Accounts receivable - associated company		356,066,932	
- Unbilled receivables		299,957	
- Work during construction period		126,047,601	
- Advance payment, or retention to contractors		-	
<b>4.1) 2<sup>nd</sup> Limited Notice to Proceed for Early Works for long lead equipment for processing plant (As a part of item 4.)</b>			2 <sup>nd</sup> LNTF dated March 23, 2017, work value of Baht 2,310.72 million. <b>There was none construction services income recognition.</b>
- Work during construction period		35,541,709	

#### The 2018 summary of connected transaction between the Company and APOT (unit: Baht)

##### Profit and Loss Statement:

- Construction services income	16,419,914
- Rental, services and utilities income	2,458,150
- Other income	84,478

##### Statement of financial position

- Accounts receivable- associate company	382,536,876
- Unbilled receivables	299,957
- Accounts receivable - retention under construction contracts	7,853,989
- Work during construction period	165,721,084
- Advances received from customers under construction contracts	-
- Advance payment, or retention to contractors	-

There was no balance figure under the asset category of the financial statement for 2018 due to the write-off of the entire amount in the 4<sup>th</sup> quarter of 2018 as follows:

- Total account receivables include performance bond receivable as per the construction contract was recorded as doubtful debt item
- Unbilled receivables was recorded as bad debt items
- Construction work in progress was recorded as additional cost of the project

## Policy and Procedure of Connected Transaction Approval

The 2/2005 Board of Directors Meeting on May 19, 2005 had resolved to define the policy for future connected transaction that any connected one should be reviewed with comments of the Audit Committee and/or the Board of Directors on its requirement and reasonability. Review and compare price and condition for each transaction to assure whether it is common business transaction as done for the connected transaction with outsiders. For effective business operation, the captioned Board of Directors Meeting had resolved to allow the Company to proceed the common business connected transactions or supportive common transaction such as obtaining new awarded project, subcontracting of the project with work value of not over than 30 MB under the condition that such transaction should be undertaken under price and condition as normal practice and for highest benefit of the Company. The connected transaction should be prior proposed to the Audit Committee Meeting and/or Board of Directors Meeting for acknowledgment and comment. The following connected transactions are required to be proposed for consideration of the Audit Committee Meeting and/ or Board of Directors Meeting for further comment in term of requirement and reasonability and also for approval prior to proceeding.

- Uncommon business transaction or unsupportive common transaction
- Connected transaction to be proceeded under price and condition different from normal practice done with outsiders
- Common business transaction or supportive common transaction to be proceeded under price and condition as normal practice with transaction value of not more than 30 MB

Anyone who is opposed, a stakeholder or may have a conflict of interest in any cases (as per the Company's Article of Association or the Securities and Exchange Commission and Stock Exchange's notification and regulation) has no authority to proceed any act in relation to the connected transaction with the Company or subsidiaries.

In addition, the Board of Directors shall monitor the Company to perform in accordance with the Securities and Exchange laws, regulation, notifications and rules as well as compliance with the Stock Exchange of Thailand's disclosure manual concerning connected transaction and the acquisition and disposition of assets of the Company and subsidiaries (if any) as well as the accounting standard of the Accountant Association.

In case the Audit Committee and/or Board of Directors have no expertise to consider the connected transaction may be arisen, the Company shall seek for an independent expert or auditor's comment to obtain recommendations as supporting information for the Audit Committee's or Board of Directors' and/or shareholders' decision as deemed appropriate.

## Approval of Common Connected Transaction

As per the Securities and Exchange Act (Vol. 4) B.E. 2008 announced on August 31, 2008, any common connected transaction is required to be proposed and approved by the Board of Directors or the Board of Directors is required to approve in principle such connected transaction prior to proceeding. Formerly, the Company's management could proceed such transaction without prior approval of the Board of Directors.



In 2005, the Board of Directors Meeting had passed its resolution in principle that any common connected transaction with value of more than 30 MB was required to obtain a prior approval of the Board of Directors (as described hereinabove in item of “Policy and procedure of connected transaction approval”). This approval is in line with the principle of common connected transaction and also guideline of practice of the new act. However, the Company later raised this issue for acknowledgement of the 7/2008 Board of Directors Meeting held on August 7, 2008.

### Review of Policy on Connected Transactions

The Company’s policy requires that transactions between related parties be proposed to the Audit Committee and the Board of Directors every year. As for 2018, the Audit Committee (at the 4<sup>th</sup> meeting for 2018) and the 7/2018 Board of Directors’ meeting held on November 12, 2018 reviewed the policy on transactions between related parties and resolved to retain the current policy.

### Policy and Trend of Future Connected Transaction

Present and future related party transactions are/will be undertaken on the ordinary course of business and on an arm’s length basis. There are no transfers of interests between the Company and its subsidiaries and persons with possible conflict of interest. The Company assigns the Audit Committee or the auditor or the independent expert to consider and audit the appropriateness of pricing and reasonableness of related party transactions and requires the disclosure of type, value and rationale of such related party transactions to the shareholders in strict compliance with the requirements of the SEC and the SET. Furthermore, the Company will continuously promote understanding among all operating officers through the holding of meetings to inform concerned parties of updates of regulations and written operating procedures to ensure full compliance therewith transparency and protection of interests of shareholders.

As for the connected transaction with ASEAN Potash Chaiyaphum Plc. in 2019, there will likely be just one transaction involving the leasing of office building space since the Company will not be engaging in any construction works related to the APOT project until APOT can provide evidence that it has secured financing for the project from a reputable source.

In 2018, the Company had transactions with related parties as per the following details of the notes to 2018 financial statements as at December 31, 2018

- Item 6                      Related Party Transactions
- Item 35.5                Guarantees: As at December 31, 2018
  - the Company has commitment from guarantee of credit facilities of the subsidiaries totaling Baht 23 million.
  - The Company and subsidiaries have shared obligations as loan guarantors for the Baht 3,268 million loan available for both to use.

However, the above were not considered as the connected transactions and the Company had strictly followed the approval procedure of the Authority Table.

# 14. Management Discussion and Analysis

## 1. The 2018 Operation Results of the Company and its subsidiaries

PTT Plc and subsidiaries which have considerable investment in projects relating to natural gas exploration, production and pipeline have downsized their investment plans from Baht 246,613 million to Baht 221,294 million. As a result, competition in the natural gas pipeline construction and installation remains high in 2018. Moreover, foreign competitors and local contractors compete hard to retain the proportion of projects in their hands, contributing to stiff price competition in the general construction projects, as well as mega infrastructure projects. There were more projects bidding than the year before. The Company had the opportunity to bid for large project and new innovation business which uses machinery to reduce reliance on labor. The Company and its subsidiaries secured a total of 10 new projects with combined value of Baht 3,621.57 million. Major projects, such as PTT Plc's 5th Transmission Pipeline Project Phase 1 which Sinopec International Petroleum Service Corporation (the main contractor) subcontracted the work to the Company, the bridge across Na Ranong intersection, construction of a manhole, and underground duct bank project on Rama 3 road together with the bridge across Na Ranong intersection project of the Bangkok Metropolitan Administration and the Metropolitan Electricity Authority, for a combined projects value totaling Baht 1,524.37 million, the engineering, procurement, construction & system installation for Lubricants Distributor Center project from PTT Oil and Retail Business Plc's lubrication products distribution center worth Baht 600 million. As of year-end 2018, the Company and Sahakarn Wisavakorn Co., Ltd. have a total of 17 projects in hand, with unrealized revenue of total of Baht 4,995 million.

The consolidated operations results for the Company and subsidiaries in 2018 showed total revenue of Baht 2,305 million, down by 5.39% from the previous year. The Company and its subsidiaries incurred a shareholders' equity attributed net loss of Baht 2,041 million, compared to a net profit of Baht 93 million in the previous year; equivalent to (net loss) and net profit of -88.55% and 3.81% respectively. The main reason for the net loss was due to uncertainty related to the potash mining development project of the Asean Potash Chaiphum Plc ("APOT"). Hence, the Company and its subsidiaries decided to record an accounting reserve and expenses for potash mining construction project consist of bad debt, allowance for doubtful debt, loss from impairment on investment and share of loss from investment in associate totaling Baht 2,093.76 million. If the loss reserve and doubtful debt allowance were not established, the Company and its subsidiaries would have net profit of Baht 53.19 million, or a net profit increase of 2.31% .

## 2. Operating Results and Profitability Analysis

### ● Revenues

#### - Construction Service Revenues

(Unit: Million Baht)

Construction Service Revenues	2018		2017		Increase (Decrease)	
	Baht	%	Baht	%	Baht	%
- Pipeline system	1,007.81	44.66	1,074.68	45.34	-66.87	-6.22
- Engineering system	420.16	18.62	345.45	14.58	74.71	21.63
- Civil work	828.68	36.72	950	40.08	-121.32	-12.77
<b>Total</b>	<b>2,256.65</b>	<b>100.00</b>	<b>2,370.13</b>	<b>100.00</b>	<b>-113.48</b>	<b>-4.79</b>

Construction service revenues of the Company and its subsidiaries stood to Baht 2,256.65 million, down by Baht 113.48 million, or 4.79% from the same period of 2017. Construction service revenues declined due to pending revenue recognition from signing of new projects. Revenues from most major new projects are partially recognized in the second half of the year. Furthermore, the value of PTT Plc's 1st Transmission Pipeline Life Extension project (a major project carried over from last year) was adjusted down from Baht 3,725 million to Baht 3,237.76 million. In 2018, the Company and its subsidiaries secured 6 more projects with combined value of Baht 1,560.52 million from the private sector and 4 more from the state sector with total value of Baht 2,061.05 million, for a total of 10 project with combined worth of Baht 3,621.57 million.

- **Sales revenue** of Baht 5.73 million was from tap water sales by TRC Utility Co., Ltd. (a subsidiary which commence business operations in March 2018) to industries and communities in Ta Sit Sub-district, Pluak Daeng District, Rayong province.
- **Interest income and other income** This consists of interest income and other income in the amount of Baht 0.84 million and Baht 41.31 million respectively, for a total of Baht 42.15 million, down Baht 23.55 million, or 35.84% from the same period of 2017 due to the Baht 39.40 million claim against the bank guarantee issued for one of the joint-contractor.

### ● Costs of construction services and sales

- **Costs of construction services** amounted to Baht 2,344.76 million, up by Baht 485.04 million, or 26.08% in the same period of 2017. In the 4<sup>th</sup> quarter of 2018, the Company and its subsidiaries recognized service expenses / obligations/ other costs related to the construction projects which the Company and its subsidiaries provided services to an associate company - Asean Potash Chaiyaphum Plc ("APOT") which has become a part of the project cost with total value of Baht 468 million (as shown in financial statements note 13.1) Consideration for recognition of such costs is the same as in allocating reserve for loss in equity interest in an associate. Recognition of this cost will take place in the 4<sup>th</sup> quarter of 2018. For the entire 2018, the Company and its subsidiaries will incur negative gross profit of Baht -385.04 million and Baht -88.11 million respectively. In case cost of construction service of APOT's Project was excluded, the Company and its subsidiaries will have construction service costs in 4<sup>th</sup> quarter 2018 and year

2018 will be at Baht 587.58 million and Baht 1,876.81 million respectively; and there will be gross profit of Baht 82.91 in 4<sup>th</sup> quarter 2018 and Baht 379.84 million for entire 2018, or an increase of 12.37% and 16.83% respectively.

	4 <sup>th</sup> quarter of 2018		2018	
	Million Baht	Gross profit Margin	Million Baht	Gross profit loss Margin
Construction Service Revenues	670.49		2,256.65	
Cost of Construction Services	-1,055.53		-2,344.76	
<b>Gross Profit</b>	<b>-385.04</b>	<b>-57.43%</b>	<b>-88.11</b>	<b>-3.90%</b>
<u>In the case of no recognition of cost related to APOT incurred in 4<sup>th</sup> quarter</u>				
Less: cost related to APOT project in the 4 <sup>th</sup> quarter	-467.95		-467.95	
<b>Gross Profit</b>	<b>82.91</b>	<b>12.37%</b>	<b>379.84</b>	<b>16.83%</b>

- **Cost of sales** of Baht 6.33 million was mostly depreciation for tools and equipment used to product tap water

- **Administrative expense and financial costs** amounted to Baht 318.43 million and Baht 21.29 million respectively. The administrative expense fell by Baht 23.48 million, or 6.87%, while financial costs rose Baht 4.90 million; mainly from interest from short-term loans and interest from debentures issued by the Company and its subsidiaries to fund working capital needs. As of year-end 2018, the outstanding balance of short-term loans and debentures was Baht 580 million and Baht 180 million respectively.

- **Loss from impairment on investment** was Baht 1,212.73 million. During 2012 - 2016, TRC provided loan to subsidiaries namely TRC International Limited and TRC Investment Limited for investment in APOT's ordinary shares at the total amount of 7.05 million shares or 25.13% of APOT's paid-up capital. Since the performance of APOT has continued losses and there is the uncertainty to acquire the source of funds for potash project development. Since there were several significant indicators of impairment that would affect the expected recoverable amount of investment in the associate, the Company decided to record a full allowance for impairment of investment in associate. (as shown in financial statement note 13.3)

- **Bad debt and doubtful debt** was Baht 365.69 million. There was a recording of bad debt and allowance for doubtful debt for an outstanding balance related to construction services provided to APOT consisting of trade and other receivables, account receivable-retention under construction contracts and unbilled receivables since there are uncertainties of APOT's operation and the outstanding balance of receivables had been due for long.

- **Loss attribute to equity holders of the Compa** was Baht 2,040.57 million representing a negative profit margin of 88.55%. While there was net profit of Baht 92.78 million in last year or 3.81% net profit margin. Significant losses was due to expenses relating to potash project, bad debt and allowance for doubtful debt, loss from impairment on investment and share of loss from investments in associate affecting to consolidated financial statements totaling Baht 2,093.76

million. If excluding all of these items, there will be net profit of Baht 53.19 million or 2.31% net profit margin.

(Unit: Million Baht)		
		2018
Net loss attributable to equity holders of the Company		2,040.57
Adjust: Transactions related to APOT's Project		
Loss from Impairment on investment	1,212.73	
Cost of construction services	467.95	
Bad debt and doubtful debt	365.69	
Share of loss from investment in associate	47.39	2,093.76
Net Profit (in case excluding effect from APOT's)		53.19

● **Income tax expenses** amounted to Baht 32.30 million, down by Baht 25.51 million, or 44.13% in line the lower income and accounting profit before corporate tax. Details of tax expenses are shown in note 29 of the financial statements.

#### ● Operating Results and Profitability

	Gross Profit (Million Baht)		Net Profit (Million Baht)	
	2018	2017	2018	2017
TRC	-240.01	306.95	-2,328.69	101.91
	-18.05%	25.26%	-172.68%	7.60%
Sahakarn Wisavakorn	117.58	170.17	91.23	112.34
	13.92%	18.00%	10.29%	11.66%
Hydrotek Sahakarn Joint Venture	24.66	19.28	19.89	15.95
	29.75%	9.11%	23.40%	7.50%
The Company and its subsidiaries	-88.72	510.42	-2,040.57	92.79
	-3.90%	21.54%	-88.55%	3.81%

\* Note: Percentage represents gross profit margin and net profit margin.

#### - Gross profit margin

Gross profit margin for 2018 fell by 3.90% from 21.54% in 2017. The gross margin of each company is as follows:

- **TRC Construction Public Company Limited** reported 18.5% lower gross profit margin compared to the 25.26% gross profit margin in 2017. The reason for the decline in gross margin was related to the cost of related to construction services as mentioned earlier.
- **Saha Wisavakorn Company Limited** reported lower gross profit margin of 13.92% relative to 18.00% in 2017. Most of Saha Wisavakorn Co., Ltd.'s projects were related to civil works which offer modest gross profit margin. The reason for the lower gross profit margin in 2018 was because the project cost estimation was revised in the prior year for 2 major projects (where over 95% of the job was completed); in order to adjust the estimated cost figure close to the expected actual cost likely to take place. The 2 major projects have been completed and delivered in 2018 accordingly.
- **Hydrotek Sahakam Joint-Venture** reported gross profit margin of 29.75% in 2018, up from 9.11% in 2017 due to the completion of the project. The project cost estimation was revised down to a figure close to the expected actual cost likely to take place.

#### - Net profit and operating profit of by business segment

The Company and its subsidiaries posted net loss of Baht 2,040.57 million in 2018, down by Baht 92.78 million from the Baht 2,133.35 million net profit in 2017. Revenues from construction services and profits by business segment are shown in Note 34 of the financial statements : Segment Information. Sizes of revenues by business segment in descending order are as follows: pipeline system 44.55%, civil works 36.63%, engineering system and energy / petrochemical plants construction 18.57% and revenues from sales and other services 0.25%. The pipeline system construction service accounts for largest portion of the profits.

#### ● Return on Shareholders' Equity

For operating results from 2013 to 2018, the Company paid dividends to its shareholders as follows:

Operating results	TRC's Net Profit (Million Baht)	Par Value for Dividend Payment Reference (Baht/share)	Dividend Payment (Baht/Share)		Amount (Million Baht)		Cash/Stock Dividend Payment to Net Profit after Legal Reserve
			Cash Dividend	Stock Dividend	Cash Dividend	Stock Dividend	
2013	81.32	0.50	0.05	-	40.82	-	52.85%
2014	255.67	0.125	0.003472	0.03125 (4 existing shares per 1 new share)	11.54	103.82	45.63%
2015	399.13	0.125	0.01	0.0156250 (8 existing shares per 1 new share)	45.64	71.30	30.48%

Operating results	TRC's Net Profit (Million Baht)	Par Value for Dividend Payment Reference (Baht/share)	Dividend Payment (Baht/Share)		Amount (Million Baht)		Cash/Stock Dividend Payment to Net Profit after Legal Reserve
			Cash Dividend	Stock Dividend	Cash Dividend	Stock Dividend	
2016	357.93	0.125	0.004	0.0178571 (7 existing shares per 1 new share)	20.54	91.71	30.01%
2017	101.91	0.125	0.002	0.00625 (20 existing shares per 1 new share)	11.74	293.48	47.86%
2018	-2,328.69	0.125	No payment of dividends due to net loss for the year				

### 3. Analysis of Financial Position of the Company and its Subsidiaries

#### ● Total assets

As of December 31, 2018, the total assets of the Company and its subsidiaries stood at Baht 3,055.78 million, down by Baht 1,542.60 million, or 33.55% year-end 2017. Details are as follows:

(Unit: Million Baht)			
	31 December 2018	31 December 2017	Increase/(Decrease)
Current assets	2,342.15	2,599.12	(256.97)
Investments in the associate and joint ventures	24.62	1,266.36	(1,241.74)
Property, plant and equipment	640.97	684.74	(43.77)
Non-current assets	48.04	48.16	(24.07)
<b>Total assets</b>	<b>3,055.78</b>	<b>4,598.38</b>	<b>(1,542.60)</b>

Significant items of assets are as follows:

1. Unbilled receivables increased by 156.20% from Baht 854.29 million to Baht 1,010.49 million due to the inability to issue invoice to collect payment for the completed works until all conditions of the relevant construction contracts are fulfilled.
2. Investment in associated company declined by the full amount from the Baht 1,259 million from year-end 2017 due to the loss from changes in equity interest in APOT (an associated) whose current and future business are clouded by uncertainties, such as revocation risk of potash mining permit due to failure to pay for the special mining privilege which would benefit the state, the delay and uncertainty in obtaining additional capital from shareholders and financial institutions to fund the development of the potash mining project. As a result, APOT currently has problem with working



capital and current liabilities exceeding current assets. Hence, the Company and its subsidiaries reduced / write-off the value of investment in APOT in the entire amount to reflect the actual current value of the investment in an associated company such as APOT.

#### ● Liabilities and Shareholders' Equity

	(Unit: Million Baht)		
	31 December 2018	31 December 2017	Increase/(Decrease)
Current liabilities	1,512.99	1,366.79	(146.20)
Loans and debentures	761.55	400.36	(361.19)
Non-current liabilities	78.22	75.41	(2.81)
Total liabilities	2,352.76	1,842.56	(51.02)
Shareholders' equity	703.02	2,755.82	(2,052.80)
Total liabilities and shareholders' equity	<b>3,055.78</b>	<b>4,598.38</b>	<b>(1,542.60)</b>

- Total liabilities increased from Baht 1,842.56 million to Baht 2,352.76 million. Significant item was the short-term bank loan to serve as working capital for the business operations
- The shareholders' equity portion declined significantly from Baht 2,755.82 million to Baht 703.02 million. The main reason was the operations results of the Company and its subsidiaries which showed a net loss of Baht 2,041.06 million and dividend payment from 2017 operation results was Baht 11.74 million.

#### 4. Liquidity and Fund Adequacy

The sources of funds of the Company and its subsidiaries encompass proceeds from business operations, shareholders' equity, issuance of debentures, and loans from commercial banks. Loans taken out by the Company for purpose of project management are usually short to medium-term and through the project financing arrangement which typically requires the borrower to provide to the lending bank a fixed deposit as collateral for credit facilities. However, with strong financial position, the Company and Sahakarn Wisavakorn Company Limited have been able to negotiate with various financial institutions for exemption from the collateral requirement. However, the net loss operations result in 2018 did not allow for payment of dividends.

The balance of cash and cash equivalents of the Company and its subsidiaries as of December 31, 2018 was Baht 82.26 million, down from Baht 254.11 million from the previous year; details as shown in the table below:

(Unit: Million Baht)

Consolidated Statement of Cash Flows	2018	2017	2016
Cash flows from received (used in) operating activities	(491.64)	339.21	(388.94)
Cash flows used in investing activities	(79.79)	(59.99)	(1,038.12)
Cash flows used in financing activities	316.99	(56.32)	246.64
Increase in translation adjustments	0.33	4.44	0.02
Net increase (decrease) in cash and cash equivalents	(254.11)	227.34	(1,180.40)
Cash and cash equivalents at the beginning of year	336.37	109.03	1,289.43
Cash and cash equivalents at the end of year	82.26	336.37	109.30

Changes in cash and cash equivalents, based on activity, for the year ended December 31, 2018 are as follows.

- Cash flows received from operating activities in the amount of Baht 491.64 million are attributable to the current year's operating performance.
- Cash flows used in investing activities in the amount of Baht 79.79 million are largely the result of Baht 63.44 million cash investment in equipment, consisting of construction of a plant to assemble metal parts and Baht 15.30 million payment for capital increase shares of SHC Crossings Company Limited. Currently, SHC Crossings Company Limited has paid-up registered capital of Baht 40 million which Sahakarn Wisavakorn Company Limited has 51% shareholding.
- Cash flows used in financing activities in the amount of Baht 316.39 million are mostly related to financial institution loans and issuance of debentures to specific of investors. The net cash balance of short-term loans was Baht 481.45 million, net cash payment from the repayment of debentures and issuance of Baht 121.08 in debentures, the disbursement of Baht 20.40 million in interest arising from both short-term loans and debentures and Baht 11.74 million in dividends payment.

### Capital Adequacy Ratio

Financial Ratio	2018	2017	2016
Debt to equity ratio (times)	3.35	0.67	0.86
Interest-bearing debt to equity ratio (times)	1.09	0.15	0.16
EBITDA to interest ratio	-87.79	16.28	32.84

In accordance to the terms regarding the rights and duties of the issuer of the debentures and holders of the debentures

\* Interest Bearing Debt to Equity Ratio refer to liabilities of a debentures issuer that require the payment of interest

\*\* EBITDA to interest ratio refers to net profit as stated in the consolidated financial statements of the debentures issuer plus interest, income tax, depreciation fee, amortization fee, amortization of goodwill fee, discount amortization fee, allowance for doubtful debt, divided by interest (excluding interest from financial lease)

The debt to equity ratio, the interest-bearing debt to equity ratio, and the EBITDA to interest ratio of the Company and its subsidiaries as of December 31, 2018 are 3.35 times, 1.09 times, and -87.79 times respectively. The Company is able to maintain its financial ratios well within the threshold set for the issuance of debenture; that is, the interest-bearing debt to equity ratio not exceeding 2 times and the EBITDA to interest ratio not lower than 4 times. The Company and its subsidiaries could not maintain the EBITDA to interest ratio due to the allocation of a significant amount of allowance for doubtful debts and impairment on investment in an associated company mentioned earlier. Such allowance for potential loss was necessary to avoid negative impact on public / investors confidence in the Company and its subsidiaries, potential business opportunities, as well as the ability to raise capital in the future. Hence, in February 2019, the Company and its subsidiaries requested to redeem the debentures before the maturity year of 2020, by notifying all debentures holders of this Baht 180 million debentures buy back offer. Debentures holders will be received repayment for principal amount plus outstanding unpaid interest on March 29, 2019. The debentures holders agreed to the early redemption of debentures amounted to Baht 150 million. One debentures holders who holds debentures worth Baht 30 million prefer to hold on to the debentures until the original March 17, 2020 maturity date and agreed to leniency with regards to maintaining of acceptable financial ratios figures for the debentures until the redemption of the debentures.

## 5. Liability Commitments and Off-Balance Sheet Arrangements

The details were disclosed in Note 35 to the financial statements: Commitments and Contingent Liabilities.

## 6. Factors Affecting Future Operations Results

The growth of construction business in the petrochemical industry and large infrastructure and utilities projects in the state sector depend fiscal, investment policies and national development plans, economic outlook and the political environment. Changes in the government can affect the investment, continuity and implementation of various large construction projects, as well as private sector's confidence and willingness to invest. Revenues of the Company and its subsidiaries are mainly derived from construction contracts and continuing ability to secure new projects. The nature of the business involves uncertainty as most large projects must have to go through the pre-qualification (PQ) screening, competitive bidding, selection process, as well as fulfillment specified terms / conditions prior to signing of construction contracts. Furthermore, the bidding of some projects are delayed / postponed for numerous reasons amid changing market conditions. In response to such uncertainties, the Company and its subsidiaries have expanded into project development and investment to mitigate some of the potential business risks of the core business, while expanding opportunities to earn steady income for the long-term. Engaging in new innovation type businesses where there are less business rivals, such as construction of the Automated Storage and Retrieval System (AS/RS).

Most of the projects undertaken by the Company and its subsidiaries are medium scale project with value of at least Baht 200 million. A considerable high amount of working capital is required to manage each project which involves purchasing of materials supplies, machineries / equipment, manpower cost and various other expenses. The Company and its subsidiaries receive income for the construction services provided after each phase of the project is completed and delivered to

the clients in accordance to the agreed terms / conditions, specifications and credit terms. Apart from the financial support from financial institutions in the form project loans, the Company and its subsidiaries also seek other sources capital and types of financing, such as request for fixed credit line / general credit line from financial institutions, issuance of short-term Bill of Exchange and debentures. However, if interest rate rises, the Company and its subsidiaries would incur higher financing cost, while the net loss operations result in 2018 of the Company and its subsidiaries could reduce investors' confidence and ability to issue debentures in the future.

# 15. Financial Statements

TRC Construction Public Company Limited and its subsidiaries  
Report and consolidated financial statements  
31 December 2018

## Independent Auditor's Report

To the Shareholders of TRC Construction Public Company Limited)

### Opinion

I have audited the accompanying consolidated financial statements of TRC Construction Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2018, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of TRC Construction Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of TRC Construction Public Company Limited and its subsidiaries and of TRC Construction Public Company Limited as at 31 December 2018, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

### Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants as issued by the Federation of Accounting Professions as relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### Emphasis of Matters

My opinion is not modified in respect of these matters.

1. I draw attention to Notes 6 and 13 to the consolidated financial statements. The Company (as approved by the Executive Committee on 12 February 2019) recorded provision for impairment loss on its investment in an associate, ASEAN Potash Chaiyaphum Public Company Limited, in which the Company held a 25.13% interest through two subsidiaries. The investment was presented in the consolidated statement of financial position under the equity method as at 31 December 2018 at Baht 1,213 million. In addition, the Company recorded allowance for doubtful debts in respect of long-term loans to related parties, granted for the purpose of investment in

this associate, and related accrued interest income, which as presented in the separate statement of financial position as at 31 December 2018 totals Baht 1,502 million. Furthermore, the Company has recorded allowance for doubtful debts in respect of the outstanding balance of other current assets relating to construction services provided by the Company to the associate, presented in the consolidated and separate financial statements as at 31 December 2018, which consists of trade and other receivables, unbilled receivables and accounts receivable - retention under construction contracts totaling approximately Baht 366 million. In addition, the Company recorded expenses, commitments and other obligations relating to the associate totaling approximately Baht 468 million as project costs. Total provision for loss with respect to this matter recognised in the year 2018 were Baht 2,047 million in the consolidated financial statements, and Baht 2,336 million in the separate financial statements since the management of the Company determined, on a prudent basis, that in 2018 there were several significant indications of impairment that would affect the expected recoverable amount of investment in the associate as well as other current assets related to the associate.

Such provisions for loss were made due to a delay in the associate planned potash mining development as a result of a working capital issue; namely that, none of the shareholders made payment for the new shares called up by the associate during the year 2018. Moreover, no progress was made in finding new investors, from either the government or private sectors, and the project was not able to secure loans from financial institutions. As a result, the associate has breached the terms of special state benefit payment as notified in writing by relevant government agencies, under which the associate was to pay the first installment of special state benefits within August 2018, or the license may be revoked, and the second installment of special state benefits was to be paid within 15 January 2019. Currently, the associate is still unable to pay either of the special state benefit installments.

According to the information in the financial statements of the associate for the year ended 31 December 2018, the auditor of the associate did not express an opinion under the report dated 22 February 2019 because of a number of significant uncertainties being faced by the associate, and the breach of payment terms with respect to both installments of the special state benefits, which gave rise to a risk that the potash mining concessions granted by the relevant government agencies might be revoked, and that the auditor might not be able to obtain sufficient and appropriate audit evidence related to the intangible assets and non-current assets used in the operation of the mining business under the concessions.

Even though the Company has set up a full provision for loss on assets related to the potash mining project, it still has a duty and responsibility to use its best efforts to recover the value of those assets. If, in the future, the value of the assets is recovered, the Company may be able to reverse excess provision and recognise profit in the future to compensate the losses from provisions set aside in the current year.

2. I draw attention to the Note 22 to the consolidated financial statements, as the Company has considered under conservative approach to set up provision for loss at the significant amount in 2018 on assets related to Potash Mining Project as discussed in item 1 above, as at 31 December 2018, the Company could not maintain financial ratio related to EBITDA to Interest Ratio in accordance with the conditions specified in the terms on the rights and obligations of the issuers and debenture holders. The debenture holders have the right to call the debenture issuer to pay the principal together with interest immediately, which resulted in the debenture becoming payable on demand, presented as current liabilities in the consolidated and separate statement of financial position. However, the Company has informed the intention to redeem the debentures prior to the maturity date, as a result of not complying with the conditions in maintaining financial ratios, by making a tender offer for all debentures with all debenture holders.

## Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond for each matter are described below

### Revenue recognition relating to construction contracts

The Company and its subsidiaries have disclosed its policies on revenue recognition for services provided under construction contracts, cost estimates for projects under construction contracts and allowance for loss on projects under construction contracts in Notes 4.1 and 5 to the financial statements. I identified revenue recognition and estimation of possible losses from construction contracts to be areas of significant risk in the audit. This is because the amount of revenue that the Company and its subsidiaries recognise from such construction contracts in each period forms a significant portion of the Group's total revenue. In addition, the process of measurement, the determination of appropriate timing of recognition, and the estimation of possible losses are areas requiring management to exercise significant judgement to assess the percentage of completion, the probability of loss, and the measurement of possible loss. There are therefore risks with respect to amount of the recognition of revenue and provisions for construction contracts.

I assessed and tested the internal controls put in place by the Company and its subsidiaries over the process of entering into contracts, estimates of project costs and revisions thereto, recognition of revenue and estimation of percentage of completion and possible losses under construction contracts by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operation of the designed controls. I also read the contracts, circularised requests for confirmation regarding the amount and the terms of the contracts, inquired with the management about the terms of and risks associated with these contracts relevant to revenue recognition and estimates of possible loss. I made enquiries of responsible executives, gain an understanding of the Company and its subsidiaries' processes to assess the percentage of completion and cost estimates for projects, compared actual costs with supporting documents and tested the calculation of the percentage of completion based on actual costs incurred. In addition, I compared the percentage of completion as determined by the project management to the assessment report sent to the project owners, considered the consistency of these figures with supporting documents and obtained a letter of representation from the project management, and reviewed the rationale for the conclusion reached by management as a result of comparison of the percentage of completion as evaluated by the project management and actual costs incurred. Moreover, I evaluated the possible losses on projects assessed by the management through an analysis of the gross profit of the construction against cost estimates for projects.

### Investment in associate

As described in Note 13 to the financial statements, the Company had a significant investment in an associate which, according to the management of the Company, might be impaired as a number of significant indicators of impairment were identified during the current year. In determining the impairment of the investment in the associate, management was required to exercise significant judgement with respect to the assessment of the feasibility of the project development plans



and the commercial operations of the associate in the future. There is thus a risk with respect to the recognition of the provision for impairment of the investment in the associate.

I gained an understanding of and evaluated the appropriateness of the management's assessment, which concluded that there were indicators of impairment loss on investment in the associate, by determining whether the management had considered both external and internal sources of information, and had taken into account the implementation of the project development plan and the associate's ability to start commercial operations of the associate in the future. I also checked relevant documents to evaluate the appropriateness of the impairment of the investment in associate assessed by the management of the Company. In addition, I assessed the adequacy of disclosure of information relating to the assessment of impairment loss on the investment in associate.

## Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon. The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

## Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

## Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.



Orawan Techawatanasirikul

Certified Public Accountant (Thailand) No. 4807

EY Office Limited

Bangkok: 25 February 2019

TRC Construction Public Company Limited and its subsidiaries

## Statement of financial position

As at 31 December 2018

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2018	2017	2018	2017
Assets					
Current assets					
Cash and cash equivalents	7	82,256,498	336,369,445	7,181,371	10,825,521
Trade and other receivables	6, 8	715,322,660	825,587,318	483,621,496	852,950,312
Unbilled receivables	6, 9	1,010,493,370	854,291,357	614,444,722	359,022,629
Accounts receivable - retention under construction contracts	6, 9	103,272,163	100,306,896	49,252,312	53,205,255
Advances paid to subcontractors under construction contracts	6	257,517,738	329,586,856	57,643,521	169,942,944
Construction in progress	6	60,122,790	56,243,218	28,633,519	46,651,260
Inventories	10	5,542,143	5,513,620	5,513,620	5,513,620
Short-term loans to related parties	6	-	-	-	2,913,947
Withholding tax deducted at source	11	69,254,538	55,306,079	49,196,854	20,999,107
Other current assets		38,371,044	35,913,661	29,142,459	22,370,628
Total current assets		2,342,152,944	2,599,118,450	1,324,629,874	1,544,395,223
Non-current assets					
Restricted deposits at banks	12	16,359,848	16,329,548	-	-
Long-term loans to related parties	6	-	-	-	1,306,517,215
Investment in associate	13	-	1,259,003,235	-	-
Investments in subsidiaries	14	-	-	476,073,232	476,073,232
Investments in joint ventures	15	24,622,523	7,359,476	2,375,587	2,375,587
Property, plant and equipment	16	640,962,329	684,744,143	605,773,668	644,061,723
Intangible assets	17	12,972,717	12,847,372	12,530,286	12,321,056
Deferred tax assets	29	12,999,513	12,395,496	8,545,005	9,816,192
Other non-current assets		5,710,394	6,580,863	5,453,223	6,264,463
Total non-current assets		713,627,324	1,999,260,133	1,110,751,001	2,457,429,468
Total assets		3,055,780,268	4,598,378,583	2,435,380,875	4,001,824,691

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

TRC Construction Public Company Limited and its subsidiaries

## Statement of financial position (continued)

As at 31 December 2018

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2018	2017	2018	2017
Liabilities and shareholders' equity					
Current liabilities					
Bank overdrafts and short-term loans from banks	18	581,803,829	70,357,683	480,000,000	70,357,683
Trade and other payables	6, 19	744,130,976	451,030,060	496,667,959	220,147,875
Unbilled payables		349,488,927	414,273,722	132,056,482	221,109,824
Unearned construction revenue	9	6,000,000	-	-	-
Accounts payable - retention under construction contracts		45,457,691	48,783,159	10,468,588	12,370,056
Advances received from customers under construction contracts	6, 9	294,016,021	371,280,297	24,821,591	81,990,108
Short-term loans	20	-	30,000,000	-	30,000,000
Short-term loans from related parties	6	-	-	510,000,000	98,000,000
Provision for liabilities under construction projects	21	24,530,822	19,650,308	6,350,827	14,962,276
Current portion of debentures	22	179,749,895	300,000,000	179,749,895	300,000,000
Current portion of liabilities under finance lease agreements	23	4,210,861	11,237,541	-	7,232,788
Income tax payable		10,929,548	1,852,410	-	-
Other current liabilities	24	34,227,610	48,687,452	28,135,840	43,181,528
Total current liabilities		2,274,546,180	1,767,152,632	1,868,251,182	1,099,352,138
Non-current liabilities					
Liabilities under finance lease agreements - net of current portion	23	1,765,375	5,977,590	-	-
Provision for long-term employee benefits	25	56,453,560	49,424,694	47,845,082	42,760,366
Provision for litigation	36.1	20,000,000	20,000,000	20,000,000	20,000,000
Total non-current liabilities		78,218,935	75,402,284	67,845,082	62,760,366
Total liabilities		2,352,765,115	1,842,554,916	1,936,096,264	1,162,112,504

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

TRC Construction Public Company Limited and its subsidiaries

## Statement of financial position (continued)

As at 31 December 2018

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2018	2017	2018	2017
Shareholders' equity					
Share capital	26				
Registered					
6,163,177,960 ordinary shares of Baht 0.125 each					
(2017: 5,869,698,010 ordinary shares of Baht 0.125 each)		770,397,245	733,712,251	770,397,245	733,712,251
Issued and paid-up					
6,163,165,825 ordinary shares of Baht 0.125 each					
(2017: 5,869,693,296 ordinary shares of Baht 0.125 each)		770,395,728	733,711,662	770,395,728	733,711,662
Share premium	26	1,041,739,823	1,041,739,823	1,041,739,823	1,041,739,823
Other deficit		(2,955,890)	(2,955,890)	-	-
Retained earnings (deficits)					
Appropriated - statutory reserve	27				
The Company		73,371,225	73,371,225	73,371,225	73,371,225
Subsidiaries		4,108,018	4,108,018	-	-
Unappropriated		(1,168,874,948)	920,121,276	(1,386,222,165)	990,889,477
Other components of shareholders' equity		14,525,756	13,398,607	-	-
Equity attributable to owners of the Company		732,309,712	2,783,494,721	499,284,611	2,839,712,187
Non-controlling interests of the subsidiaries		(29,294,559)	(27,671,054)	-	-
Total shareholders' equity		703,015,153	2,755,823,667	499,284,611	2,839,712,187
Total liabilities and shareholders' equity		3,055,780,268	4,598,378,583	2,435,380,875	4,001,824,691

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

## Income statement

For the year ended 31 December 2018

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2018	2017	2018	2017
Revenues					
Construction services income	6	2,256,649,610	2,370,133,222	1,329,568,297	1,215,338,685
Sales		5,725,201	-	-	-
Interest income	6	837,141	1,339,972	234,802	65,661,076
Other income	6	41,311,535	64,354,172	18,724,048	60,396,350
Total revenues		2,304,523,487	2,435,827,366	1,348,527,147	1,341,396,111
Expenses					
Cost of construction services	6	2,344,764,613	1,859,716,316	1,569,576,700	908,386,508
Cost of sales		6,327,582	-	-	-
Administrative expenses		318,426,612	341,911,264	272,737,424	290,387,774
Bad debt and doubtful debt (reversal)	6	365,688,596	(127,330)	1,805,762,835	-
Loss from impairment on investment in associate	13	1,212,730,981	-	-	-
Loss on change in shareholders' equity of associate	13	-	35,001,334	-	-
Total expenses		4,247,938,384	2,236,501,584	3,648,076,959	1,198,774,282
Profit (loss) before share of profit (loss) from investments in associate and joint ventures, finance cost and income tax expenses		(1,943,414,897)	199,325,782	(2,299,549,812)	142,621,829
Share of loss from investment in associate	13.2	(47,389,365)	(34,337,471)	-	-
Share of profit (loss) from investments in joint ventures	15.2	1,963,196	(116,061)	-	-
Profit (loss) before finance cost and income tax expenses		(1,988,841,066)	164,872,250	(2,299,549,812)	142,621,829
Finance cost	6	(21,289,459)	(16,396,236)	(27,867,071)	(16,634,777)
Profit (loss) before income tax expenses		(2,010,130,525)	148,476,014	(2,327,416,883)	125,987,052
Income tax expenses	29	(32,298,577)	(57,806,327)	(1,271,187)	(24,080,688)
Profit (loss) for the year		(2,042,429,102)	90,669,687	(2,328,688,070)	101,906,364
Profit (loss) attributable to:					
Equity holders of the Company		(2,040,572,652)	92,782,562	(2,328,688,070)	101,906,364
Non-controlling interests of the subsidiaries		(1,856,450)	(2,112,875)		
		(2,042,429,102)	90,669,687		
Earnings per share					
Basic earnings (loss) per share	30				
Profit (loss) attributable to equity holders of the Company		(0.331)	0.015	(0.378)	0.017

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

## Statement of comprehensive income

For the year ended 31 December 2018

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2018	2017	2018	2017
<b>Profit (loss) for the year</b>		(2,042,429,102)	90,669,687	(2,328,688,070)	101,906,364
<b>Other comprehensive income:</b>					
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>					
Exchange differences on translation of financial statements in foreign currency		242,984	3,220,888	-	-
Share of other comprehensive income from associate	13.2	1,117,110	-	-	-
Gain on change in shareholders' equity of associate	13	-	9,498	-	-
Net other comprehensive income to be reclassified to profit or loss in subsequent periods - net of income tax		1,360,094	3,230,386	-	-
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>					
Actuarial loss on employee benefit	25	-	(1,733,458)	-	(759,199)
Income tax effect	29	-	346,691	-	151,840
Net other comprehensive income not to be reclassified to profit or loss in subsequent periods - net of income tax		-	(1,386,767)	-	(607,359)
<b>Other comprehensive income for the year</b>		1,360,094	1,843,619	-	(607,359)
<b>Total comprehensive income for the year</b>		(2,041,069,008)	92,513,306	(2,328,688,070)	101,299,005
<b>Total comprehensive income attributable to:</b>					
Equity holders of the Company		(2,039,445,503)	91,478,283	(2,328,688,070)	101,299,005
Non-controlling interests of the subsidiaries		(1,623,505)	1,035,023		
		(2,041,069,008)	92,513,306		

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



## Statement of changes in shareholders' equity

For the year ended 31 December 2018

(Unit: Baht)

Consolidated financial statements															
Equity attributable to the parent's shareholders															
	Issued and paid-up share capital	Share premium	Other deficit		Other components of equity										
			Deficit on revaluation of investment in subsidiaries	Total other deficit	Retained earnings			Other comprehensive income			Total equity attributable to owners of the Company	Equity attributable to non-controlling interests of the subsidiaries	Total shareholders' equity		
					Appropriated - Statutory reserve		Share of other comprehensive income from associate	Total other components of shareholders' equity							
					The Company	Subsidiary			Exchange differences on translation of financial statements in foreign currency	Share of other comprehensive income from associate				Total other components of shareholders' equity	
Note															
Balance as at 1 January 2017	641,998,220	1,041,739,823	(2,955,890)	(2,955,890)	72,637,344	4,108,018	941,717,344	(226,834)	13,316,119	2,712,560,978	(28,706,152)	2,683,854,826			
Profit for the year	-	-	-	-	-	-	92,782,562	-	-	92,782,562	(2,112,875)	90,669,687			
Other comprehensive income for the year	-	-	-	-	-	-	(1,386,767)	72,900	9,498	(1,304,279)	3,147,898	1,843,619			
Total comprehensive income for the year	-	-	-	-	-	-	91,395,795	72,900	9,498	91,478,283	1,035,023	92,513,306			
Increase in capital from share dividend	91,713,442	-	-	-	-	-	(91,713,442)	-	-	-	-	-			
Appropriated to statutory reserve	-	-	-	-	733,881	-	(733,881)	-	-	-	-	-			
Dividend paid	-	-	-	-	-	-	(20,544,540)	-	-	(20,544,540)	-	(20,544,540)			
Increase in non-controlling interests from establishment of subsidiary	-	-	-	-	-	-	-	-	-	-	75	75			
Balance as at 31 December 2017	733,711,662	1,041,739,823	(2,955,890)	(2,955,890)	73,371,225	4,108,018	920,121,276	13,615,943	13,398,607	2,783,494,721	(27,671,054)	2,755,823,667			
Balance as at 1 January 2018	733,711,662	1,041,739,823	(2,955,890)	(2,955,890)	73,371,225	4,108,018	920,121,276	13,615,943	13,398,607	2,783,494,721	(27,671,054)	2,755,823,667			
Loss for the year	-	-	-	-	-	-	(2,040,572,652)	-	-	(2,040,572,652)	(1,856,460)	(2,042,429,102)			
Other comprehensive income for the year	-	-	-	-	-	-	-	10,039	1,117,110	1,127,149	232,945	1,360,094			
Total comprehensive income for the year	-	-	-	-	-	-	(2,040,572,652)	10,039	1,117,110	(2,039,445,503)	(1,623,505)	(2,041,069,009)			
Increase in capital from share dividend	36,684,066	-	-	-	-	-	(36,684,066)	-	-	-	-	-			
Dividend paid	-	-	-	-	-	-	(11,739,506)	-	-	(11,739,506)	-	(11,739,506)			
Balance as at 31 December 2018	770,395,728	1,041,739,823	(2,955,890)	(2,955,890)	73,371,225	4,108,018	(1,168,874,948)	13,625,982	899,774	14,525,756	(29,294,559)	703,015,153			

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

TRC Construction Public Company Limited and its subsidiaries

## Statement of changes in shareholders' equity (continued)

For the year ended 31 December 2018

(Unit: Baht)

	Note	Separate financial statements				
		Issued and paid-up share capital	Share premium	Retained Earning		Total shareholders' equity
				Appropriated - Statutory reserve	Unappropriated	
<b>Balance as at 1 January 2017</b>		641,998,220	1,041,739,823	72,637,344	1,002,582,335	2,758,957,722
Profit for the year		-	-	-	101,906,364	101,906,364
Other comprehensive income for the year		-	-	-	(607,359)	(607,359)
Total comprehensive income for the year		-	-	-	101,299,005	101,299,005
Increase in capital from share dividend	31	91,713,442	-	-	(91,713,442)	-
Appropriated to statutory reserve	27	-	-	733,881	(733,881)	-
Dividend paid	31	-	-	-	(20,544,540)	(20,544,540)
<b>Balance as at 31 December 2017</b>		<b>733,711,662</b>	<b>1,041,739,823</b>	<b>73,371,225</b>	<b>990,889,477</b>	<b>2,839,712,187</b>
<b>Balance as at 1 January 2018</b>		733,711,662	1,041,739,823	73,371,225	990,889,477	2,839,712,187
Loss for the year		-	-	-	(2,328,688,070)	(2,328,688,070)
Other comprehensive income for the year		-	-	-	-	-
Total comprehensive income for the year		-	-	-	(2,328,688,070)	(2,328,688,070)
Increase in capital from share dividend	26, 31	36,684,066	-	-	(36,684,066)	-
Dividend paid	31	-	-	-	(11,739,506)	(11,739,506)
<b>Balance as at 31 December 2018</b>		<b>770,395,728</b>	<b>1,041,739,823</b>	<b>73,371,225</b>	<b>(1,386,222,165)</b>	<b>499,284,611</b>

หมายเหตุประกอบงบการเงินเป็นส่วนหนึ่งของการงบการเงินนี้

## Cash flow statement

For the year ended 31 December 2018

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Cash flows from operating activities</b>				
Profit (loss) before tax	(2,010,130,525)	148,476,014	(2,327,416,883)	125,987,052
Adjustments to reconcile profit (loss) before tax to net cash provided by (paid from) operating activities				
Depreciation and amortisation	112,872,397	106,451,651	100,962,278	96,889,957
Bad debt and doubtful debt (reversal)	365,688,596	(127,330)	1,805,762,835	-
Unrealised loss on exchange rate	3,149,091	6,042,494	1,538,182	9,335,058
(Gain) loss on disposal of equipment	(18,926)	105,150	(7,801)	176,825
Loss on write-off of equipment	1,613,862	4,784,870	1,653,214	4,749,298
Allowance for impairment loss on equipment	343,607	-	-	-
Loss from impairment on investment in associate	1,212,730,981	-	-	-
Loss on change in shareholders' equity of associate	-	35,001,334	-	-
Share of loss from investment in associate	47,389,365	34,337,471	-	-
Share of profit (loss) from investments in joint ventures	(1,963,196)	116,061	-	-
Provision for liabilities under construction projects	37,095,921	1,180,240	20,782,380	303,884
Provision for long-term employee benefits	10,308,110	8,655,697	8,345,689	7,127,686
Amortised transaction cost of debenture	829,895	-	829,895	-
Interest income	(837,141)	(1,339,972)	(234,802)	(65,661,076)
Interest expenses	21,673,193	18,992,412	28,343,666	19,397,651
<b>Profit (loss) from operating activities before changes in operating assets and liabilities</b>	<b>(199,254,770)</b>	<b>362,676,092</b>	<b>(359,441,347)</b>	<b>198,306,335</b>
<b>(Increase) decrease in operating assets</b>				
Trade and other receivables	(275,329,556)	(416,594,875)	(143,861,111)	(416,967,650)
Unbilled receivables	(156,879,247)	915,187,293	(256,834,064)	754,449,077
Accounts receivable - retention under construction contracts	(10,819,256)	(12,836,222)	(3,901,046)	(7,115,133)
Advance paid to subcontractors under construction contracts	72,069,118	107,429,654	112,299,423	(112,669,666)
Construction in progress	(3,879,572)	(56,243,218)	18,017,741	(46,651,260)
Inventories	(28,523)	-	-	-
Other current assets	(2,457,383)	(5,721,967)	(6,771,831)	(3,429,880)
Other non-current assets	870,469	1,180,190	811,240	1,376,289
<b>Increase (decrease) in operating liabilities</b>				
Trade and other payables	285,624,471	(12,300,854)	252,422,339	(108,108,485)
Unbilled payables	(63,784,795)	(509,196,746)	(88,053,342)	(176,810,575)
Unearned construction revenue	6,000,000	-	-	-
Accounts payable - retention under construction contracts	(3,325,468)	(2,449,078)	(1,901,468)	(12,200,496)
Advances received from customers under construction contracts	(77,264,276)	25,538,615	(57,168,517)	(9,236,134)
Provision for liabilities under construction projects	(33,215,407)	(4,537,422)	(30,393,829)	(3,556,416)
Other current liabilities	11,079,557	28,127,229	11,106,185	23,965,539
Provision for long-term employee benefits	(3,279,244)	(309,522)	(3,260,973)	(227,043)
<b>Cash flows from (used in) operating activities</b>	<b>(453,873,882)</b>	<b>419,949,169</b>	<b>(556,930,600)</b>	<b>81,124,502</b>
Cash paid for income tax	(52,023,277)	(80,738,857)	(28,197,747)	(64,170,279)
Received from withholding tax refund	14,249,361	-	-	-
<b>Net cash flows from (used in) operating activities</b>	<b>(491,647,798)</b>	<b>339,210,312</b>	<b>(585,128,347)</b>	<b>16,954,223</b>

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

**Cash flow statement (continued)**

For the year ended 31 December 2018

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Cash flows from investing activities</b>				
Decrease in current investments	-	360,770	-	360,770
Increase in restricted deposits at banks	(30,300)	(29,620)	-	-
Increase in short-term loans to related parties	-	-	(594,947)	(337,048)
Cash paid for investment in subsidiary	-	-	-	(249,925)
Cash paid for investment in joint venture	(15,299,850)	(5,099,950)	-	-
Interest income	836,964	1,375,162	233,479	247,456
Cash received from disposal of equipment	50,290	370,461	39,158	198,479
Cash paid for purchase of equipment	(63,437,315)	(54,920,840)	(46,234,770)	(48,467,287)
Cash paid for purchase of intangible assets	(1,909,712)	(2,043,530)	(1,909,712)	(1,980,000)
<b>Net cash flows used in investing activities</b>	<b>(79,789,923)</b>	<b>(59,987,547)</b>	<b>(48,466,792)</b>	<b>(50,227,555)</b>
<b>Cash flows from financing activities</b>				
Increase (decrease) in bank overdrafts and short-term loans from banks	511,446,146	(33,896,959)	409,642,317	(33,896,959)
Increase (decrease) in short-term loans	(30,000,000)	30,000,000	(30,000,000)	30,000,000
Increase in short-term loans from related parties	-	-	412,000,000	68,000,000
Cash received from issuance of debenture	180,000,000	100,000,000	180,000,000	100,000,000
Cash paid for transaction cost of debenture	(1,080,000)	-	(1,080,000)	-
Repayment of debenture	(300,000,000)	(100,000,000)	(300,000,000)	(100,000,000)
Dividend paid	(11,739,506)	(20,544,540)	(11,739,506)	(20,544,540)
Interest expenses	(20,395,658)	(19,072,856)	(21,639,034)	(19,302,196)
Decrease in liabilities under finance lease agreements	(11,238,895)	(12,804,571)	(7,232,788)	(8,997,190)
Increase in non-controlling interest from establishment of subsidiary	-	75	-	-
<b>Net cash flows from (used in) financing activities</b>	<b>316,992,087</b>	<b>(56,318,851)</b>	<b>629,950,989</b>	<b>15,259,115</b>
Increase in translation adjustments	332,687	4,439,884	-	-
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(254,112,947)</b>	<b>227,343,798</b>	<b>(3,644,150)</b>	<b>(18,014,217)</b>
Cash and cash equivalents at beginning of the year	336,369,445	109,025,647	10,825,521	28,839,738
<b>Cash and cash equivalents at end of the year (Note 7)</b>	<b>82,256,498</b>	<b>336,369,445</b>	<b>7,181,371</b>	<b>10,825,521</b>

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

**Cash flow statement (continued)**

For the year ended 31 December 2018

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Supplemental cash flows information</b>				
Non-cash items consist of				
Increase (decrease) in purchase of assets that have yet to be paid	5,857,734	9,605,500	16,423,542	(3,173,159)
Transfer construction supplies to assets under construction	-	1,608,139	-	1,608,139
Interest expenses recorded as cost of project	1,132,897	3,755,148	1,132,897	3,755,148
Issuance of stock dividend	36,684,066	91,713,442	36,684,066	91,713,442
Actuarial loss on employee benefit	-	(1,733,458)	-	(759,199)
Share of other comprehensive income from associate	1,117,110	-	-	-

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

## Notes to consolidated financial statements

For the year ended 31 December 2018

### 1. General information

TRC Construction Public Company Limited (“the Company”) is a public company incorporated and domiciled in Thailand. The Company is principally engaged in construction service and its registered address is No. 8, Soi Sukhapiban 5 soi 32, Kwang Tha Raeng, Khet Bang Khen, Bangkok.

### 2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Profession Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development dated 11 October 2016, issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

#### 2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of TRC Construction Public Company Limited (“the Company”) and the following subsidiary companies (“the subsidiaries”).

Company's name	Nature of business	Country of Incorporation	Percentage of shareholding	
			2018 (percent)	2017 (percent)
Held by the Company				
Sahakarn Wisavakorn Company Limited	Construction services - basic infrastructure	Thailand	99.99	99.99
TRC Investment Limited	Holding company	The Republic of Mauritius	100.00	100.00
TRC Utility Company Limited	To produce and distribute tap water	Thailand	99.97	99.97
Held by the Company's subsidiaries				
Hydrotek Sahakarn Joint Venture (held by Sahakarn Wisavakorn Company Limited)	Construction services	Thailand	49.00	49.00
TRC International Limited (held by TRC Investment Limited)	Holding company	Hong Kong	100.00	100.00
TRC Middle East LLC (held by TRC International Limited)	Construction services	Sultanate of Oman	70.00	70.00
TRC Engineering LLC (held by TRC International Limited)	Construction services	Sultanate of Oman	70.00	70.00

- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
- c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
- e) The assets and liabilities in the financial statements of overseas subsidiary companies are translated to Baht using the exchange rate prevailing on the end of reporting period, and revenues and expenses translated using yearly average exchange rates. The resulting differences are shown under the caption of “Exchange differences on translation of financial statements in foreign currency” in the statements of changes in shareholders’ equity.
- f) Material balances and transactions between the Company and its subsidiary companies have been eliminated from the consolidated financial statements.
- g) Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.

2.3 The separate financial statements present investments in subsidiaries, associate and joint ventures under the cost method.

2.4 The subsidiary has joint arrangements which assessed as joint operations between the subsidiary and other joint operators. The subsidiary recognises its shares of assets, liabilities, revenue and expenses of the joint operation, in proportion to its interest, to the separate financial statements, the details as follows:

Name of entity	Nature of Business	Country of incorporation	Interest in joint operations	
			2018 (percent)	2017 (percent)
Sahahydro Joint Venture	Construction services	Thailand	-	-

During the current year, Sahakarn Wisavakorn Company Limited, which is the Company’s subsidiary, entered into joint venture contract with Hydrotek Public Company Limited under the name of “Sahahydro Joint Venture” in order to bid and execution a new project from Provincial Waterworks Authority. The portion of investment between Sahakarn Wisavakorn Company Limited and Hydrotek Public Company Limited was 49% and 51%, respectively. Later, both parties agree that Sahakarn Wisavakorn Company Limited will not share any gain and loss as well as damage maybe arisen from this project whereas Hydrotek Public Company Limited will be responsible for project execution. The subsidiary has outstanding obligation by Baht 112 million in respect of bank guarantee provided to joint venture.

### 3. New financial reporting standards

#### (a) Financial reporting standards that became effective in the current year

During the year, the Company and its subsidiaries have adopted the revised financial reporting standards and interpretations (revised 2017) which are effective for fiscal years beginning on or after 1 January 2018. These financial



reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes and clarifications directed towards disclosures in the notes to financial statements. The adoption of these financial reporting standards does not have any significant impact on the Company and its subsidiaries' financial statements.

**(b) Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2019**

The Federation of Accounting Professions issued a number of revised and new financial reporting standards and interpretations (revised 2018) which are effective for fiscal years beginning on or after 1 January 2019. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Company and its subsidiaries believe that most of the revised financial reporting standards will not have any significant impact on the financial statements when they are initially applied. However, the new standard involves changes to key principles, as summarised below.

**TFRS 15 Revenue from Contracts with Customers**

TFRS 15 supersedes the following accounting standards together with related Interpretations.

TAS 11 (revised 2017)	Construction contracts
TAS 18 (revised 2017)	Revenue
TSIC 31 (revised 2017)	Revenue - Barter Transactions Involving Advertising Services
TFRIC 13 (revised 2017)	Customer Loyalty Programmes
TFRIC 15 (revised 2017)	Agreements for the Construction of Real Estate
TFRIC 18 (revised 2017)	Transfers of Assets from Customers

Entities are to apply this standard to all contracts with customers unless those contracts fall within the scope of other standards. The standard establishes a five-step model to account for revenue arising from contracts with customers, with revenue being recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model.

The management of the Company and its subsidiaries is currently evaluating the impact of this standard to the financial statements in the year when it is adopted.

**(c) Financial reporting standards related to financial instruments that will become effective for fiscal years beginning on or after 1 January 2020**

During the current year, the Federation of Accounting Professions issued a set of TFRSs related to financial instruments, which consists of five accounting standards and interpretations, as follows:

Financial reporting standards:

TFRS 7	Financial Instruments: Disclosures
TFRS 9	Financial Instruments

Accounting standard:

TAS 32

Financial Instruments: Presentation

Financial Reporting Standard Interpretations:

TFRIC 16

Hedges of a Net Investment in a Foreign Operation

TFRIC 19

Extinguishing Financial Liabilities with Equity Instruments

These TFRSs related to financial instruments make stipulations relating to the classification of financial instruments and their measurement at fair value or amortised cost (taking into account the type of instrument, the characteristics of the contractual cash flows and the Company's business model), calculation of impairment using the expected credit loss method, and hedge accounting. These include stipulations regarding the presentation and disclosure of financial instruments. When the TFRSs related to financial instruments are effective, some accounting standards, interpretations and guidance which are currently effective will be cancelled.

The management of the Company and its subsidiaries is currently evaluating the impact of these standards to the financial statements in the year when they are adopted.

## 4. Significant accounting policies

### 4.1 Revenue recognition

#### *Rendering of construction services*

Services income from construction contracts is recognised on the basis of percentage of completion based on the assessment of the project engineer, and also compared with the percentage of completion which is arrived at based on the proportion of actual construction costs incurred up to the end of the year to the total anticipated construction costs. Allowance for the total anticipated loss on construction projects will be made in the accounts as soon as the possibility of loss is ascertained.

The recognised revenues which have not yet been due as per contracts have been shown under the caption of "Unbilled receivable" in the statements of financial position.

#### *Sales of goods*

Sales of goods are recognised when the significant risks and rewards of ownership of the goods have passed to the buyer. Sales are the invoiced value, excluding value added tax, of goods supplied after deducting discounts and allowances.

#### *Interest income*

Interest income is recognised on an accrual basis based on the effective interest rate.

### 4.2 Cost of construction services and expenses

In determining cost of construction services, the total anticipated construction costs are attributed to each construction projects and then recognised as cost of services in profit or loss on the basis of percentage of completion.

The recognised cost of construction which have not yet been due have been shown under the caption of "Unbilled payable" in the statements of financial position.

The actual cost of construction incurred but not yet recognised as cost of services in profit or loss has been regarded as “Construction in progress” in the statements of financial position.

Construction in progress includes the cost of raw material, direct labour and other expenses incurred for each project. Such construction in progress is valued at the lower of cost or net realisable value.

Expenses are recognised on an accrual basis.

#### 4.3 Cash and cash equivalents

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

#### 4.4 Trade and other receivables

Trade and other receivables are stated at the net realisable value. Allowance for doubtful debts is provided for the estimated losses that may be incurred in collection of receivables. The allowance is generally based on collection experiences and analysis of debt aging.

#### 4.5 Inventories

Finished goods is valued at the lower of cost (under the weighted average method) and net realisable value and includes all production costs and attributable factory overheads.

Raw materials, chemicals, spare parts and factory supplies are valued at the lower of cost under the first-in, first-out method and net realisable value and are charged to production costs whenever consumed.

#### 4.6 Investments

- a) Investments in associate and joint ventures are accounted for in the consolidated financial statements using the equity method.
- b) Investments in associate, subsidiaries and joint ventures are accounted for in the separate financial statements using the cost method less provision for impairment of investments (if any).

#### 4.7 Property, plant and equipment/Depreciation

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

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

Building and leasehold improvement	3 - 30 years
Tools and equipment	5 years
Furniture, fixtures and office equipment	3 - 5 years
Motor vehicles	5 years

Depreciation is included in determining income.

No depreciation is provided on land and construction in progress.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

#### 4.8 Intangible assets

The intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Intangible assets with finite lives are amortised on a systematic basis over the economic useful life and tested for impairment whenever there is an indication that the intangible assets may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

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

	<u>Useful lives</u>
Computer software	3 - 10 years

#### 4.9 Related party transactions

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

They also include associated companies, and individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors and officers with authority in the planning and direction of the Company's operations.

#### 4.10 Long-term leases

Leases of property, plant or equipment which transfer substantially all the risks and rewards of ownership are classified as financial leases. Financial leases are capitalised at the lower of the fair value of the leased assets and the present value of the minimum lease payments. The outstanding rental obligations, net of finance charges, are included in other long-term payables, while the interest element is charged to profit or loss over the lease period. The assets acquired under financial leases is depreciated over the useful life of the asset.

Lease of property, plant or equipment which do not transfer substantially all the risks and rewards of ownership are classified as operating leases. Operating lease payments are recognised as an expense in profit or loss on a straight line basis over the lease term.

#### 4.11 Foreign currencies

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

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

#### 4.12 Impairment of assets

At the end of each reporting period, the Company and its subsidiaries perform impairment reviews in respect of the property, plant and equipment and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Company and its subsidiaries also carry out annual impairment reviews in respect of goodwill. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount. In determining value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that, based on information available, reflects the amount that the Company and its subsidiaries could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

An impairment loss is recognised in profit or loss.

In the assessment of asset impairment if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Company and its subsidiaries estimate the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss unless the asset is carried at a revalued amount, in which case the reversal, which exceeds the carrying amount that would have been determined, is treated as a revaluation increase.

#### 4.13 Employee benefits

##### *Short-term employee benefits*

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

##### *Post-employment benefits and other long-term employee benefits*

###### *Defined contribution plans*

The Company and its subsidiaries and their employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company and its subsidiaries. The fund's assets are held in a separate trust fund and the Company and its subsidiaries' contributions are recognised as expenses when incurred.

###### *Defined benefit plans and other long-term employee benefits*

The Company and its subsidiaries have obligations in respect of the severance payments they must make to employees upon retirement under labor law. The Company and its subsidiaries treat the severance payment obligations as a defined benefit plan. In addition, the Company and its subsidiaries provides other long-term employee benefits plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive income.

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

Past service costs are recognised in profit or loss on the earlier of the date of the plan amendment or curtailment and the date that the Company and its subsidiaries recognise restructuring-related costs

#### 4.14 Provisions

Provisions are recognised when the Company and its subsidiaries have a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

#### 4.15 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

##### Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

##### Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Company and its subsidiaries recognise deferred tax liabilities for all taxable temporary differences while they recognise deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Company and its subsidiaries review and reduce the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Company and its subsidiaries record deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

#### 4.16 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Company and its subsidiaries apply a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Company and its subsidiaries measure fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

- Level 1      Use of quoted market prices in an active market for such assets or liabilities
- Level 2      Use of other observable inputs for such assets or liabilities, whether directly or indirectly
- Level 3      Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Company and its subsidiaries determine whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

## 5. Significant accounting judgements and estimates

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

### Estimated construction project costs

Management applied judgement in estimating the costs of construction projects based on details of the construction work, taking into account the volume and value of construction materials to be used in the project, labour costs and other miscellaneous costs to be incurred to completion of service, taking into account the direction of the movement in these costs.

### Provision for liabilities under construction projects

#### *Provision for liabilities under project warranties*

A provision is recognised for expected warranty claims in respect of construction projects completed during the year, based on repair expenses expected to be paid in the future, actual costs incurred in the past and the contract value. It is expected that most of these costs will be incurred in the next financial year and all will have been incurred within two years of the end of reporting period.

#### *Provision for losses on construction projects*

A provision is recognised for the loss expected to be realised on each construction project, based on estimates of anticipated costs that take into account the progress of the project and actual costs incurred to the completion date.

#### *Provision for penalties due to project delays*

A provision is recognised for the loss expected to be realised on construction projects that cannot be completed within the stipulated timeframe. The loss is estimated based on the penalty rate stipulated in the contract and the amount expected to be paid in the future.

### Impairment of investments

The Company and its subsidiaries treat these investments as impaired when there has been a significant or prolonged decline in the fair value below their cost or where other objective evidence of impairment exists. The determination of what is “significant” or “prolonged” requires judgement of the management.

### Post-employment benefits under defined benefit plans and other long-term employee benefits

The obligation under the defined benefit plan and other long-term employee benefit plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

## 6. Related party transactions

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



(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements		Transfer Pricing Policy
	2018	2017	2018	2017	
<b>Transactions with subsidiary companies</b>					
(eliminated from the consolidated financial statements)					
Construction service income	-	-	-	2	Cost plus margin
Cost of construction services	-	-	9	13	Cost plus margin
Interest income	-	-	-	65	At rate of 3.5 - 5.0% p.a.
Interest expense	-	-	7	1	At rate of 2.5 - 4.5% p.a. (2017: 2.5% p.a.)
Other income	-	-	4	3	Cost plus margin
<b>Transactions with associated company</b>					
Construction services income	16	298	16	298	Cost plus margin
Rental income	2	1	2	1	Contract price
<b>Transactions with related parties</b>					
Construction services income	-	1	-	1	Cost plus margin
Cost of construction services	138	-	-	-	Contract price
Other income	9	-	8	-	Cost plus margin

As at 31 December 2018 and 2017, the balances of the accounts between the Company, its subsidiaries and those related companies are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Trade and other receivables - related parties (Note 8)</b>				
Subsidiary companies	-	-	219,489	159,227
Associated company	382,537	380,104	382,537	380,104
Joint ventures	6,487	223	6,237	-
Total	389,024	380,327	608,263	539,331
Less: Allowance for doubtful debts	(382,537)	-	(594,906)	(13,128)
Total trade and other receivables - related parties - net	6,487	380,327	13,357	526,203

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Unbilled receivable - related parties (Note 9)</b>				
Subsidiary companies	-	-	-	617
Associated company	-	11,992	-	11,992
Total	-	11,992	-	12,609
<b>Account receivable - retention under construction contracts - related parties (Note 9)</b>				
Associated company	7,854	7,514	7,854	7,514
Joint venture	45,691	45,691	45,691	45,691
Total	53,545	53,205	53,545	53,205
Less: Allowance for doubtful debts	(7,854)	-	(7,854)	-
Total account receivable - retention under construction contracts - related parties - net	45,691	53,205	45,691	53,205
<b>Advances paid to subcontractor under construction contract - related party</b>				
Joint venture	32,454	-	-	-
Total	32,454	-	-	-
<b>Construction in progress - related party</b>				
Associated company	-	46,651	-	46,651
Total	-	46,651	-	46,651
<b>Short-term loans to related parties</b>				
Subsidiary companies	-	-	60,129	59,537
Total	-	-	60,129	59,537
Less: Allowance for doubtful debts	-	-	(60,129)	(56,623)
Total short-term loans to related parties - net	-	-	-	2,914
<b>Long-term loans to related parties</b>				
Subsidiary companies	-	-	1,306,517	1,306,517
Total	-	-	1,306,517	1,306,517
Less: Allowance for doubtful debts	-	-	(1,306,517)	-
Total long-term loans to related parties - net	-	-	-	1,306,517

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Trade and other payables - related parties (Note 19)</b>				
Subsidiary companies	-	-	11,481	22,705
Joint Ventures	44,072	-	-	-
Total	44,072	-	11,481	22,705
<b>Total</b>				
<b>Advances received from customers under construction contracts - related party (Note 9)</b>				
Associated company	-	27,869	-	27,869
Total	-	27,869	-	27,869
<b>Short-term loans from related parties</b>				
Subsidiary companies	-	-	510,000	98,000
Total	-	-	510,000	98,000

On 12 February 2019, the meeting No. 3/2019 of the Company's Executive Committee passed its resolution to approve the recording of bad debt and allowance for doubtful debts for an outstanding balance of loans to TRC Investment Limited and TRC International Limited and the related accrued interest income, totaling Baht 1,505.3 million (including the short-term loans and the related accrued interest income unrelated to the investment in APOT of Baht 3.8 million), and the outstanding balance relating to construction services provided to the associate, consists of trade and other receivables, accounts receivable - retention under construction contracts and unbilled receivables, totaling Baht 365.7 million since there are uncertainties of the associate's operation, as described in Note 13, and the outstanding balance of the receivables had been due for long. The Executive Committee is of the opinion that there is high possibility that the Company may not receive the repayment of the loan, together with the related accrued interest income, and the outstanding balance relating to construction services.

As at 31 December 2018 and 2017, the balance of loans to and short-term loans from between the Company and those related companies and the movement are as follows:

(Unit: Thousand Baht)

(Unit: Thousand Baht)						
Loans to	Related by	Separate financial statements				
		Balance as at 31 December 2017	Increase	Decrease	Exchange rate adjustment	Balance as at 31 December 2018
Short-term loans						
TRC Investment Limited	Subsidiary company	2,914	311	-	(3)	3,222
TRC Engineering LLC	Subsidiary company	56,623	81	-	-	56,704
TRC Middle East LLC	Subsidiary company	-	203	-	-	203
ASEAN Potash Chaiphum Public Company Limited	Associated company	-	13,000	(13,000)	-	-
Total		59,537	13,595	(13,000)	(3)	60,129
Less: Allowance for doubtful debts		(56,623)	(3,506)	-	-	(60,129)
Short-term loans - net		2,914	10,089	(13,000)	(3)	-

(Unit: Thousand Baht)

Loans to	Related by	Separate financial statements				
		Balance as at 31 December 2017	Increase	Decrease	Exchange rate adjustment	Balance as at 31 December 2018
Long-term loans						
TRC Investment Limited	Subsidiary company	1,260,508	-	-	-	1,260,508
TRC International Limited	Subsidiary company	46,009	-	-	-	46,009
Total		1,306,517	-	-	-	1,306,517
Less: Allowance for doubtful debts		-	(1,306,517)	-	-	(1,306,517)
Long-term loans - net		1,306,517	(1,306,517)	-	-	-

Loans to related parties carried interest at rates of 3.5% - 7.0% per annum (2017: 3.5% - 7.0% per annum), due for repayment on demand and no security to guarantee.

The purpose of loans to TRC Investment Limited and TRC International Limited are long-term investments in ordinary share of ASEAN Potash Chaiyaphum Public Company Limited as described in Note 13. The Company classified these loans as long-term loans to related parties in the separate financial statements.

(Unit: Thousand Baht)

Short-term loans	Related by	Separate financial statements			
		Balance as at 31 December 2017	Increase	Decrease	Balance as at 31 December 2018
Sahakarn Wisavakorn Company Limited	Subsidiary company	31,000	819,000	(394,000)	456,000
Hydrotek Sahakarn Joint Venture	Subsidiary company	67,000	90,000	(103,000)	54,000
Total		98,000	909,000	(497,000)	510,000

Short-term loans from related parties carried interests at rates of 2.5% - 4.5% per annum (2017: 2.5% per annum), due for repayment on demand and no security to guarantee.

### Directors and management's benefits

During the years ended 31 December 2018 and 2017, the Company and its subsidiaries had employee benefit expenses of their directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Short-term employee benefits	33	36	33	35
Post-employment benefits	2	2	2	2
Total	35	38	35	37

### Guarantee obligations with related parties

The Company has outstanding guarantee obligations with its related parties, as described in Note 35.4 and 35.5.

## 7. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Cash	1,354	1,375	451	481
Deposits at banks	80,902	199,069	6,730	10,345
Investment in mutual fund	-	135,925	-	-
Total	82,256	336,369	7,181	10,826

As at 31 December 2018, deposits in saving accounts and fixed deposits carried interests between 0.10% and 1.30% per annum (2017: between 0.13% and 0.63% per annum).

Investment in mutual fund consist of the money market fund which invests in deposits at banks and short-term debt instruments with an average maturity of three months or less and not subject to withdrawal restrictions.

## 8. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Trade accounts receivable - related parties</b>				
Aged on the basis of due dates				
Not yet due	3,111	14,102	3,111	14,102
Past due				
Up to 3 months	-	131,071	-	132,636
3 - 6 months	10,627	-	10,627	-
6 - 12 months	34,147	234,918	35,204	234,918
Over 12 months	333,166	-	334,731	-
Total trade accounts receivable - related parties	381,051	380,091	383,673	381,656
Less: Allowance for doubtful debts	(381,051)	-	(381,051)	-
<b>Total trade accounts receivable - related parties - net</b>	<b>-</b>	<b>380,091</b>	<b>2,622</b>	<b>381,656</b>
<b>Trade accounts receivable - unrelated parties</b>				
Aged on the basis of due dates				
Not yet due	439,580	408,714	330,162	290,666
Past due				
Up to 3 months	183,735	33,742	55,349	33,742
3 - 6 months	83,106	-	83,066	-
6 - 12 months	6	-	-	-
Over 12 months	12,596	12,685	-	-
<b>Total trade accounts receivable - unrelated parties</b>	<b>719,023</b>	<b>455,141</b>	<b>468,577</b>	<b>324,408</b>
Less: Allowance for doubtful debts	(11,928)	(11,928)	-	-
Translation adjustment	(668)	(757)	-	-
<b>Total trade accounts receivable - unrelated parties - net</b>	<b>706,427</b>	<b>442,456</b>	<b>468,577</b>	<b>324,408</b>
<b>Total trade accounts receivable - net</b>	<b>706,427</b>	<b>822,547</b>	<b>471,199</b>	<b>706,064</b>
<b>Other receivables</b>				
Advance to related parties	7,973	236	14,239	16,514
Interest receivable from related parties	-	-	210,351	141,160
Others	2,409	2,804	1,687	2,339
<b>Total other receivables</b>	<b>10,382</b>	<b>3,040</b>	<b>226,277</b>	<b>160,013</b>
Less: Allowance for doubtful debt	(1,486)	-	(213,855)	(13,127)
<b>Total other receivables - net</b>	<b>8,896</b>	<b>3,040</b>	<b>12,422</b>	<b>146,886</b>
<b>Total trade and other receivables - net</b>	<b>715,323</b>	<b>825,587</b>	<b>483,621</b>	<b>852,950</b>

The Company and the subsidiaries transferred rights to receive payment under construction contracts to secure the credit facilities with financial institutions. Pledged accounts receivable amounting to Baht 935 million included in the accounts receivable balance as at 31 December 2018 (the Company only: Baht 827 million) (2017: Baht 800 million, the Company only: Baht 692 million).

## 9. Unbilled receivables/advances received from customers under construction contracts

(Unit: Thousand Baht)				
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Unbilled receivables and advances received from customers under construction contracts</b>				
Project value as per contracts	19,357,590	16,245,331	12,432,894	11,993,514
Accumulated amount recognised as revenue on percentage of completion basis	12,355,890	10,122,651	8,687,951	7,358,383
Less: Bad debt	(300)	-	(300)	-
Less: Value of total billed	(11,639,113)	(9,639,640)	(8,098,028)	(7,081,350)
Unbilled receivables - net	1,010,493	854,291	614,445	359,023
Advances received from customers	(294,016)	(371,280)	(24,822)	(81,990)
Total	716,477	483,011	589,623	277,033
Accounts receivables - retention under construction contract	111,126	100,307	57,106	53,205
Less: Allowance for doubtful debt	(7,854)	-	(7,854)	-
<b>Accounts receivable - retention under construction contract - net</b>	103,272	100,307	49,252	53,205
<b>Unearned construction revenue</b>				
Project value as per contracts	600,000	-	-	-
Value of total billed	6,000	-	-	-
Less: Accumulated amount recognised as revenue on percentage of completion basis	-	-	-	-
Unearned construction revenue	6,000	-	-	-



## 10. Inventories

(Unit: Thousand Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2018	2017	2018	2017	2018	2017
Raw materials and construction supplies	7,909	7,892	(2,378)	(2,378)	5,531	5,514
Finished goods	11	-	-	-	11	-
Total	7,920	7,892	(2,378)	(2,378)	5,542	5,514

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2018	2017	2018	2017	2018	2017
Raw materials and construction supplies	7,892	7,892	(2,378)	(2,378)	5,514	5,514
Total	7,892	7,892	(2,378)	(2,378)	5,514	5,514

## 11. Withholding tax deducted at source

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Year 2014	-	14,249	-	-
Year 2015	7,861	7,861	-	-
Year 2016	6,522	6,522	-	-
Year 2017	26,674	26,674	20,999	20,999
Year 2018	28,198	-	28,198	-
	69,255	55,306	49,197	20,999

The Company and its subsidiary record withholding tax deducted at source as an asset since they are entitled to claim for a refund of such tax. However, the net realisable value of tax refund is subject to the exercise of the claim right by the Company and its subsidiary, and to the result of an audit of the Company's and its subsidiary's taxes by Government Agency related.

## 12. Restricted deposits at banks

These represent saving deposit and fixed deposits pledged with banks to secure credit facilities and bank guarantee facilities issued by the bank on behalf of the subsidiary, as described in Note 35.4.

## 13. Investment in associate

### 13.1 Details of associate

Company's name	Nature of business	Country of incorporation	Consolidated financial statements					
			Shareholding percentage		Cost		Carrying amounts based on equity method	
			2018	2017	2018	2017	2018	2017
			(percent)	(percent)	(Thousand Baht)	(Thousand Baht)	(Thousand Baht)	(Thousand Baht)
Held by TRC Investment Limited								
ASEAN Potash Chaiphaphum Public Company Limited	Mining Industries	Thailand	22.46	22.46	1,261,274	1,261,274	1,126,742	1,168,092
Held by TRC International Limited								
ASEAN Potash Chaiphaphum Public Company Limited	Mining Industries	Thailand	2.67	2.67	100,000	100,000	85,989	90,911
Total					1,361,274	1,361,274	1,212,731	1,259,003
Less: Allowance for loss on impairment of investment					(1,361,274)	-	(1,212,731)	-
Total investment in associate - net					-	1,361,274	-	1,259,003

On 18 January 2012, the meeting No. 1/2012 of the Company's Board of Directors approved an investment of Baht 50 million by TRC International Limited, which is the company's subsidiary in Hong Kong, in ordinary shares of ASEAN Potash Chaiphaphum Public Company Limited (APOT). On 6 January 2015, TRC International Limited (TRCI), increased its investment in APOT by purchasing additional 250,000 ordinary shares from its shareholders at Baht 200 per share, a total of Baht 50 million. As a result, TRCI's investment increase to Baht 100 million.

On 16 September 2015, the Meeting No. 9/2015 of the Company's Board of Directors approved TRC Investment Limited, a subsidiary in Mauritius, to acquire additional ordinary shares of ASEAN Potash Chaiphaphum Public Company Limited (APOT) at the aggregate of not exceeding 6.3 million shares, at price of Baht 200 per share, total value of Baht 1,260 million from Thermal Trade and Investment Limited. Subsequently, on 15 October 2015, TRC Investment Limited make the first payment for APOT's shares totaling of Baht 355 million in accordance with terms of payment stipulated in Share Sale and Purchase Agreement ("SPA"). On 30 October 2015, APOT's share certificates of 1.8 million shares were transferred to TRC Investment Limited.

During January and May 2016, TRC Investment Limited made the second through fourth payments for the 4.5 million share subscription totaling Baht 906 million. As a result, TRC Group's shareholding in APOT increased to 26.22%, consisting of 23.43% shareholding of TRC Investment Limited and 2.79% shareholding of TRC International Limited, with APOT's current paid-up capital as of 31 December 2016 of Baht 2,688 million and classifies this investment as investment in an associate.

During the year 2017, APOT received the proceeds of Baht 80 million from a shareholder in payment for additional ordinary shares 1,174,886 newly issued shares at the price of Baht 68.43 per share), and registered the change in

its paid-up capital from Baht 2,688 million to Baht 2,806 million. As a result, TRC Group's shareholding in APOT decreased from 26.22% at the end of 2016 to 25.13% at the end of 2017 (consisting of 22.46% interest held by TRC Investment Limited and a 2.67% interest held by TRC International Limited). The Company recorded the net result from the change in the shareholders' equity of Baht 35 million, presenting in the consolidated comprehensive income for the year ended 31 December 2017.

In accordance with the concession agreements with the Department of Primary Industries and Mines, Ministry of Industry, in January 2015, APOT has an obligations to pay a special state benefits for concession in 8 equal installments, each of Baht 433 million plus interest at the rate of 6.5% per annum, or a total of Baht 569 million, commencing from 2018. APOT is also committed to pay various funds each year throughout the concession period. APOT received a demand letter from Chaiyaphum Provincial Industry Office to pay the first installment of special state benefits of Baht 569 million, together with a fine at 15% per annum, within 90 days from the receipt date of the letter which due in August 2018. Otherwise the license may be revoked in accordance with Section 128 of the Minerals Act B.E. 2560.

In April 2018, APOT approved the first increase of paid up capital for not exceeding 29 million ordinary shares which will be allocated to the existing shareholders at the offering price of Baht 68.43 per share. The period for subscription and settlement was by the end of July 2018. Upon the ending of the period for new shares subscription and settlement, none of the shareholders subscribed for the new shares.

On 22 February 2019, the Meeting of APOT's Board of Director passed a resolution to propose that the Annual General Meeting of the shareholders to be held on 26 April 2019 adopt a resolution to offer approval for the amendment a share offering price from Baht 68.43 per share to Baht 15.00 per share and offer approval for called up ordinary share No.1 in amounting by allotment 35 million newly issued ordinary shares to the existing shareholders at a ratio of 4 existing shares to 5 new shares at the offering price of Baht 15.00 per share or totaling by Baht 526 million. The Company's management is during consideration for the proceeding of this issue.

As per the APOT's financial statements for the year ended 31 December 2018, APOT is unable to comply with the terms of special state benefits payment since APOT is in the process of acquiring for the additional investment from its shareholders and/or applying for credit approval from commercial banks. In November 2018, APOT received a demand letter to pay the second installment of special state benefits of Baht 569 million within 15 January 2019.

On 12 February 2019, the meeting No. 3/2019 of the Company's Executive Committee passed its resolution not to involve in any further investment in the associate, including not to be awarded any construction services from the associate unless there will be the promising source of funds for its project development. The Committee also approved the subsidiaries' recording of a full allowance for impairment of its investment, amounting to Baht 1,361 million, since the associate situation contains various uncertainties, such as the obligation to pay two installments of the special state benefits for concession which may cause the revocation of the concession. There is also the uncertainty to acquire the source of funds for potash project development both in the aspect of the capital investment which there is no progress made in finding new investors, both government and private sector, and in the aspect of credit facilities approval from the commercial banks. Consequently, causing the financial liquidity problem to the associate which delay the progress of its project. In addition, the Company has had to recognise substantial losses of the associate under the equity method for several consecutive years. Moreover, the amounts of the losses recognised will increase in the future because of the recognition of fines imposed due to the associate's inability to make payment of the special state benefits that it is required to pay each year. Furthermore, the associate's current liabilities substantially exceeded its current assets.

In addition, the Company's Executive Committee passed its resolution to record the expenses and commitments relating to construction services provided to the associate as the cost of the project. These consisted of advance payment to subcontractors both construction and engineering services, construction in progress, prepaid insurance expense and bank guarantee fee, totaling Baht 468 million.

Even though the Company has set up a full provision for loss on assets related to Potash Mining Project, it still has a duty and responsibility to use its best efforts to recover the value of those assets. If, in the future, the value of the assets is recovered, the Company may be able to reverse excess provision and recognise profit in the future to compensate the losses from provisions set aside in the current year.

### 13.2 Share of loss

During the years, the Company has recognised its share of loss from investment in associated company in the consolidated financial statements as follows:

(Unit: Thousand Baht)

Company's name	Share of loss from investments in associate		Share of other comprehensive income from investments in associate	
	For the years ended 31 December			
	2018	2017	2018	2017
ASEAN Potash Chaiyaphum Public Company Limited	(47,389)	(34,337)	1,117	-
Total	(47,389)	(34,337)	1,117	-

### 13.3 Summarised financial information about material associate

Summarised information about financial position

(Unit: Million Baht)

	2018	2017
Current assets	23	110
Non-current assets	6,871	6,127
Current liabilities	(1,928)	(531)
Non-current liabilities	(3,459)	(4,018)
<b>Net assets</b>	1,507	1,688
Shareholding percentage (percent)	25.13	25.13
<b>Share of net assets</b>	379	424
Elimination entries	(13)	(12)
Goodwill	847	847
Total	1,213	1,259
Less: Allowance for loss on impairment of investment	(1,213)	-
<b>Carrying amounts of associate based on equity method</b>	-	1,259

Summarised information about comprehensive income

(Unit: Million Baht)

	For the year ended 31 December	
	2018	2017
Revenue	7	2
Profit (loss)	(186)	(112)
Other comprehensive income	4	-
Total comprehensive income	(182)	(112)

## 14. Investments in subsidiaries

Details of investments in subsidiaries as presented in separate financial statements are as follows:

Company's name	Nature of business	Country of incorporation	Paid-up capital		Shareholding percentage		Cost method	
			2018	2017	2018 (percent)	2017 (percent)	2018 (Baht)	2017 (Baht)
Sahakam Wisavakorn Company Limited	Construction services - basic infrastructure	Thailand	500,000,000 Baht	500,000,000 Baht	99.99	99.99	620,894,691	620,894,691
TRC Investment Limited	Holding company	The Republic of Mauritius	1 USD	1 USD	100.00	100.00	32	32
TRC Utility Company Limited	To produce and distribute tap water	Thailand	250,000 Baht	250,000 Baht	99.97	99.97	249,925	249,925
Total							621,144,648	621,144,648
Less: Allowance for loss on impairment of investment							(145,071,416)	(145,071,416)
Total investments in subsidiaries - net							476,073,232	476,073,232

Details of investments in subsidiaries which are held by the Company's subsidiaries are as follows:

Company's name	Nature of business	Country of incorporation	Paid-up capital		Shareholding percentage		Cost method	
			2018	2017	2018	2017	2018	2017
					(percent))	(percent))	(Baht)	(Baht)
Held by Sahakarn Wisavakorn Company Limited								
Hydrotek Sahakarn Joint Venture	Construction services	Thailand	1,000,000 Baht	1,000,000 Baht	49.00	49.00	490,000	490,000
Held by TRC Investment Limited								
TRC International Limited	Holding company	Hong Kong	10 HKD	10 HKD	100.00	100.00	33	33
Held by TRC International Limited								
TRC Middle East LLC	Construction services	Sultanate of Oman	150,000 Omani Rial	150,000 Omani Rial	70.00	70.00	12,322,330	12,322,330
TRC Engineering LLC	Construction services	Sultanate of Oman	250,000 Omani Rial	250,000 Omani Rial	70.00	70.00	13,654,506	13,654,506
Total							26,466,869	26,466,869
Less: Allowance for loss on impairment of investment							(25,976,836)	(25,976,836)
Total investments in subsidiaries which are held by the Company's subsidiaries - net							490,033	490,033

Sahakarn Wisavakorn Company Limited, which is the Company's subsidiary, and Hydrotek Public Company Limited agree that the subsidiary will be responsible for project execution of Hydrotek Sahakarn Joint Venture whereas Hydrotek Public Company Limited will not share any gain and loss as well as damage maybe arisen from this project.

On 10 March 2016, the Meeting No. 3/2016 of the Company's Board of Directors passed a resolution to approve the closure of TRC Middle East LLC and TRC Engineering LLC. On 31 December 2018, these subsidiaries have been in the liquidation process.

## 15. Investments in joint ventures

### 15.1 Details of joint ventures

Company's name	Nature of business	Consolidated financial statements					
		Shareholding percentage		Cost		Carrying amounts based on equity method	
		2018	2017	2018	2017	2018	2017
		(percent)	(percent)	(Thousand Baht)	(Thousand Baht)	(Thousand Baht)	(Thousand Baht)
Held by the Company							
Sinopec-TRC Joint Venture	Construction service	30	30	2,376	2,376	2,376	2,376
Held by Sahakarn Wisavakorn Company Limited							
SH Crossings Company Limited	Construction service	51	51	20,400	5,100	22,247	4,983
Total				22,776	7,476	24,623	7,359

Company's name	Nature of business	Separate financial statements			
		Shareholding percentage		Cost	
		2561	2560	2561	2560
		(percent)	(percent)	(Thousand Baht)	(Thousand Baht)
Sinopec-TRC Joint Venture	Construction service	30	30	2,376	2,376
Total				2,376	2,376

On 12 March 2018, The Meeting No. 3/2018 of the Company's Board of Directors passed its resolution to approve the establishment of a joint venture with SINOHYDRO (Thailand) Company Limited to be the subcontractor for Surface Processing Plant and Facilities of ASEAN Potash Mining Project in Bamnet Narong District, Chaiyaphum Province from which the Company obtained the letter of award for the captioned works in February 2016.

On 20 March 2018, The Meeting No. 1/2018 of SH Crossings Company Limited's Board of Directors passed its resolution to approve calling for the capital increase of remaining registered capital of Baht 30 million or 75% of a total shares. The joint venture received the full payment of addition shares on 30 April 2018.

## 15.2 Share of profit (loss)

During the years, the Company has recognised its share of profit (loss) from investments in joint ventures in the consolidated financial statements as follows:

(Unit: Thousand Baht)

Company's name	Share of profit (loss) from investments in joint ventures		Share of other comprehensive income from investments in joint ventures	
	For the years ended 31 December			
	2018	2017	2018	2017
SH Crossings Company Limited	1,963	(116)	-	-
Total	1,963	(116)	-	-

The consolidated financial statements for the years ended 31 December 2018 and 2017 do not include share of profit (loss) on investment in Sinopec-TRC Joint Venture because the effect of these transactions on the financial statements is immaterial.



### 15.3 Summarised financial information about material joint venture

Summarised information about financial position

(Unit: Million Baht)

	SH Crossings Company Limited	
	2018	2017
Cash and cash equivalent	2	10
Other current assets	127	-
Non-current assets	15	-
Current liabilities	(100)	-
<b>Net assets</b>	44	10
Shareholding percentage (percent)	51	51
<b>Share of net assets</b>	22	5

Summarised information about comprehensive income

(Unit: Million Baht)

	For the years ended 31 December	
	SH Crossings Company Limited	
	2018	2017
Revenue	138	-
Depreciation and amortization	(2)	-
Income tax expense	(1)	-
Profit (loss)	4	-
Other comprehensive income	-	-
Total comprehensive income	4	-

## 16. Property, plant and equipment

(Unit: Thousand Baht)

Consolidated financial statements							
	Land	Building	Tools and equipment	Furniture, fixtures and office equipment	Motor vehicles	Construction in progress	Total
<b>Cost:</b>							
1 January 2017	142,062	212,768	499,695	96,908	99,130	57,113	1,107,676
Additions	-	270	2,842	2,847	47	61,578	67,584
Disposals	-	-	(239)	(490)	(1,270)	-	(1,999)
Written-off	-	(2,676)	(9,811)	(3,339)	-	-	(15,826)
Transfers in (out)	-	75,622	10,217	1,731	-	(87,570)	-
31 December 2017	142,062	285,984	502,704	97,657	97,907	31,121	1,157,435
Additions	-	761	39,511	5,353	30	23,640	69,295
Disposals	-	-	(49)	(150)	-	-	(199)
Written-off	-	-	(11,970)	(4,625)	-	-	(16,595)
Transfers in (out)	-	7,003	31,266	743	-	(39,547)	(535)
31 December 2018	142,062	293,748	561,462	98,978	97,937	15,214	1,209,401
<b>Accumulated depreciation:</b>							
1 January 2017	-	19,555	238,495	60,022	62,990	-	381,062
Depreciation for the year	-	7,679	70,203	13,439	12,872	-	104,193
Depreciation on disposals	-	-	(139)	(446)	(938)	-	(1,523)
Depreciation on written-off	-	(2,676)	(5,274)	(3,091)	-	-	(11,041)
31 December 2017	-	24,558	303,285	69,924	74,924	-	472,691
Depreciation for the year	-	10,737	75,691	13,198	10,927	-	110,553
Depreciation on disposals	-	-	(18)	(150)	-	-	(168)
Depreciation on written-off	-	-	(10,480)	(4,501)	-	-	(14,981)
31 December 2018	-	35,295	368,478	78,471	85,851	-	568,095
<b>Allowance for impairment loss:</b>							
1 January 2018	-	-	-	-	-	-	-
Increase during the year	-	-	344	-	-	-	344
31 December 2018	-	-	344	-	-	-	344
<b>Net book value:</b>							
31 December 2017	142,062	261,426	199,419	27,733	22,983	31,121	684,744
31 December 2018	142,062	258,453	192,640	20,507	12,086	15,214	640,962
<b>Depreciation for the year</b>							
2017 (Baht 65 million included in cost of sales and construction services, and the balance in administrative expenses)							104,193
2018 (Baht 66 million included in cost of sales and construction services, and the balance in administrative expenses)							110,553

(Unit: Thousand Baht)

	Separate financial statements						
	Land	Building	Tools and Equipment	Furniture, fixtures and office equipment	Motor vehicles	Construction in progress	Total
<b>Cost:</b>							
1 January 2017	140,472	212,768	375,314	84,975	77,302	57,113	947,944
Additions	-	237	2,397	2,400	44	43,274	48,352
Disposals	-	-	-	(358)	(621)	-	(979)
Written-off	-	(2,676)	(8,465)	(2,862)	-	-	(14,003)
Transfers in (out)	-	75,622	10,217	1,731	-	(87,570)	-
31 December 2017	140,472	285,951	379,463	85,886	76,725	12,817	981,314
Additions	-	761	38,068	4,859	-	18,970	62,658
Disposals	-	-	(49)	(64)	-	-	(113)
Written-off	-	-	(7,498)	(3,463)	-	-	(10,961)
Transfers in (out)	-	7,003	8,292	743	-	(16,573)	(535)
31 December 2018	140,472	293,715	418,276	87,961	76,725	15,214	1,032,363
<b>Accumulated depreciation:</b>							
1 January 2017	-	19,555	139,087	49,440	44,317	-	252,399
Depreciation for the year	-	7,679	62,657	12,817	11,558	-	94,711
Depreciation on disposals	-	-	-	(315)	(289)	-	(604)
Depreciation on written-off	-	(2,676)	(3,952)	(2,626)	-	-	(9,254)
31 December 2017	-	24,558	197,792	59,316	55,586	-	337,252
Depreciation for the year	-	10,735	65,506	12,500	9,985	-	98,726
Depreciation on disposals	-	-	(18)	(63)	-	-	(81)
Depreciation on written-off	-	-	(5,959)	(3,349)	-	-	(9,308)
31 December 2018	-	35,293	257,321	68,404	65,571	-	426,589
<b>Allowance for impairment loss:</b>							
1 January 2018	-	-	-	-	-	-	-
Increase during the year	-	-	-	-	-	-	-
31 December 2018	-	-	-	-	-	-	-
<b>Net book value:</b>							
31 December 2017	140,472	261,393	181,671	26,570	21,139	12,817	644,062
31 December 2018	140,472	258,422	160,955	19,557	11,154	15,214	605,774
<b>Depreciation for the year</b>							
2017 (Baht 64 million included in cost of sales and construction services, and the balance in administrative expenses)							94,711
2018 (Baht 61 million included in cost of sales and construction services, and the balance in administrative expenses)							98,726

As at 31 December 2018, certain equipment items have been fully depreciated but are still in use. The gross carrying amount, before deducting accumulated depreciation of those assets, amounted to approximately Baht 204 million (The Company only: Baht 117 million) (2017: Baht 188 million, the Company only: Baht 96 million).

As at 31 December 2018, the Company and its subsidiary has tools and motor vehicles acquired under finance lease agreements, with net book value amounting to approximately Baht 10 million (The company only: Baht 8 million) (2017: Baht 27 million, the Company only: Baht 16 million).

As at 31 December 2018, the Company has mortgaged land and building which has book value amounting to Baht 100 million (2017: Baht 180 million) with banks to be collateral against credit facilities received from the bank.

## 17. Intangible assets

The net book value of intangible assets, which is computer software, as at 31 December 2018 and 2017 is presented below.

(Unit: Thousand Baht)		
	Consolidated financial statements	Separate financial statements
As at 31 December 2018		
Cost	26,521	25,682
Less: Accumulated amortisation	(13,548)	(13,152)
Net book value	12,973	12,530
As at 31 December 2017		
Cost	24,076	23,237
Less: Accumulated amortisation	(11,229)	(10,916)
Net book value	12,847	12,321

A reconciliation of the net book value of intangible assets for the years 2018 and 2017 is presented below.

(Unit: Thousand Baht)				
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Net book value at beginning of year	12,847	14,511	12,321	13,970
Acquisition of computer software	1,910	594	1,910	530
Transfer from property, plant and equipment	535	-	535	-
Amortisation	(2,319)	(2,258)	(2,236)	(2,179)
Net book value at end of year	12,973	12,847	12,530	12,321

## 18. Bank overdrafts and short-term loans from banks

(Unit: Thousand Baht)

	Interest rate (percent per annum)	Consolidated financial statements	
		2018	2017
Bank overdrafts	6.87%	1,804	-
Promissory note	3.00% - 4.60%	580,000	-
Trust receipt	- (2017: 4.35%)	-	70,358
Total		581,804	70,358

(Unit: Thousand Baht)

	Interest rate (percent per annum)	Separate financial statements	
		2018	2017
Promissory note	3.00% - 4.60%	480,000	-
Trust receipt	- (2017: 4.35%)	-	70,358
Total		480,000	70,358

As at 31 December 2017, trust receipt has been secured by the transfer of right to receive from accounts receivable, as described in Note 8.

## 19. Trade and other payables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Trade accounts payable - related party	44,072	-	-	-
Trade accounts payable - unrelated parties	434,822	367,312	234,976	141,540
Advances from related parties	-	-	5,792	22,526
Fixed assets payable	17,717	11,322	17,702	129
Accrued interest expense - related parties	-	-	5,689	179
Accrued expenses - unrelated parties	247,520	72,396	232,509	55,774
Total trade and other payables	744,131	451,030	496,668	220,148

As at 31 December 2018, the Company has outstanding accrued expenses amounting to Baht 157.8 million from recording of expenses and commitments relating to construction services provided to the associate, as described in Note 13.

## 20. Short-term loans

These represent non-transferable bill of exchanges amounting to Baht 30 million issued through the private placement with an interest rate of 3.85% per annum. The bill of exchanges have a term of 183 days. The Company repaid the bill of exchanges on 20 February 2018.

## 21. Provision for liabilities under construction projects

(Unit: Thousand Baht)

	Consolidated financial statements		
	Warranties	Loss on construction	Total
As at 1 January 2017	22,808	199	23,007
Increase during the year	2,000	876	2,876
Decrease from occurrence of actual expense	(4,338)	(199)	(4,537)
Reversal of provisions	(1,696)	-	(1,696)
As at 31 December 2017	18,774	876	19,650
Increase during the year	40,768	2,554	43,322
Decrease from occurrence of actual expense	(32,339)	(876)	(33,215)
Reversal of provisions	(5,226)	-	(5,226)
As at 31 December 2018	21,977	2,554	24,531

(Unit: Thousand Baht)

	Separate financial statements		
	Warranties	Loss on construction	Total
As at 1 January 2017	18,215	-	18,215
Increase during the year	2,000	-	2,000
Decrease from occurrence of actual expense	(3,557)	-	(3,557)
Reversal of provisions	(1,696)	-	(1,696)
As at 31 December 2017	14,962	-	14,962
Increase during the year	20,650	2,554	23,204
Decrease from occurrence of actual expense	(30,394)	-	(30,394)
Reversal of provisions	(1,421)	-	(1,421)
As at 31 December 2018	3,797	2,554	6,351

## 22. Debentures

The Company has issued unsubordinated and unsecured debentures without a debentureholders' representative in the name-registered, as detailed below.

					(Unit: Thousand Baht)	
Debentures	Interest rate	Interest payment schedule	Terms	Due date	Consolidated / Separate financial statements	
					2018	2017
Debentures 1/2016	4.40%	Quarterly, starting from 10 June 2016	2 years	10 March 2018	-	200,000
Debentures 1/2017	4.50%	Quarterly, starting from 12 October 2017	1 year	12 July 2018	-	100,000
Debentures 1/2018	4.80%	Quarterly, starting from 17 March 2018	2 years 2 days	17 March 2020	180,000	-
Total debentures - at face value					180,000	300,000
Less: Unamortised portion of deferred transaction costs					(250)	-
Debentures - net					179,750	300,000
Less: Current portion					(179,750)	(300,000)
Debentures - net of current portion					-	-

Movement of the debentures account during the year ended 31 December 2018 are summarised below:

		(Unit: Thousand Baht)	
		Consolidated/Separate financial statements	
Balance as at 1 January 2018			300,000
Issuance of debenture			180,000
Repayment of debenture			(300,000)
Transaction cost of debenture			(1,080)
Amortisation of transaction cost of debenture			830
Balance as at 31 December 2018			179,750

Under rights and responsibilities of debenture issuer, the Company has to comply with certain covenants and restrictions including maintenance of interest bearing debt to equity ratio and EBITDA to interest ratio at the rate prescribed in the agreements along with debentures' periods (debts mean interest bearing loans).

The Company has considered under conservative approach to set up provision for loss at the significant amount in 2018 on assets related to Potash Mining Project. As a result, as at 31 December 2018, the Company could not maintain EBITDA to interest ratio at the rate prescribed in the agreement, which resulted in the debenture becoming payable on demand. Therefore, the Company classified such debenture as current liabilities. However, in February 2019, the Company has offered to redeem the debenture prior to the maturity date from all debenture's holders. The classification of such liabilities to be current is in accordance with financial reporting standards.



## 23. Liabilities under finance lease agreements

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Liabilities under finance lease agreements	6,203	17,992	-	7,374
Less: Deferred interest	(227)	(776)	-	(141)
Total	5,976	17,216	-	7,233
Less: Current portion	(4,211)	(11,238)	-	(7,233)
Liabilities under finance lease agreements - net of current portion	1,765	5,978	-	-

The Company and its subsidiary have entered into the finance lease agreements with leasing companies for rental of tools and motor vehicles for use in its operation, whereby it is committed to pay rental on a monthly basis. The terms of the agreements are generally between 3 and 5 years.

Future minimum lease payments required under the finance lease agreements were as follows.

(Unit: Thousand Baht)

	As at 31 December 2018					
	Consolidated financial statements			Separate financial statements		
	Less than 1 year	1-5 years	Total	Less than 1 year	1-5 years	Total
Future minimum lease payments	4,415	1,788	6,203	-	-	-
Deferred interest expenses	(204)	(23)	(227)	-	-	-
Present value of future minimum lease payments	4,211	1,765	5,976	-	-	-

(Unit: Thousand Baht)

	As at 31 December 2017					
	Consolidated financial statements			Separate financial statements		
	Less than 1 year	1-5 years	Total	Less than 1 year	1-5 years	Total
Future minimum lease payments	11,789	6,203	17,992	7,374	-	7,374
Deferred interest expenses	(551)	(225)	(776)	(141)	-	(141)
Present value of future minimum lease payments	11,238	5,978	17,216	7,233	-	7,233

## 24. Other current liabilities

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Suspense output VAT	29,696	43,990	26,505	41,799
VAT payable	1,044	1,769	-	-
Others	3,488	2,928	1,631	1,383
Total	34,228	48,687	28,136	43,182

## 25. Provision for long-term employee benefits

Provision for long-term employee benefits, which is compensations on employees' retirement, was as follows:

(Unit: Thousand Baht)

	Consolidated financial statements					
	2018			2017		
	Post-employment benefits	Other long-term benefits	Total	Post-employment benefits	Other long-term benefits	Total
<b>Defined benefit obligation at beginning of year</b>	44,806	4,619	49,425	35,053	4,292	39,345
Current service cost	7,845	1,387	9,232	7,099	1,361	8,460
Interest cost	970	106	1,076	921	113	1,034
Actuarial (gain) loss arising from						
Demographic assumptions changes	-	-	-	578	(82)	496
Financial assumptions changes	-	-	-	1,375	42	1,417
Experience adjustments	-	-	-	(220)	(798)	(1,018)
Benefits paid during the year	(2,756)	(523)	(3,279)	-	(309)	(309)
<b>Defined benefit obligation at end of year</b>	<b>50,865</b>	<b>5,589</b>	<b>56,454</b>	<b>44,806</b>	<b>4,619</b>	<b>49,425</b>

(Unit: Thousand Baht)

	Separate financial statements					
	2018			2017		
	Post-employment benefits	Other long-term benefits	Total	Post-employment benefits	Other long-term benefits	Total
<b>Defined benefit obligation at beginning of year</b>	38,794	3,966	42,760	31,423	3,677	35,100
Current service cost	6,269	1,163	7,432	5,795	1,131	6,926
Interest cost	824	90	914	817	96	913

(Unit: Thousand Baht)

	Separate financial statements					
	2018			2017		
	Post-employment benefits	Other long-term benefits	Total	Post-employment benefits	Other long-term benefits	Total
Actuarial (gain) loss arising from						
Demographic assumptions changes	-	-	-	(109)	(119)	(228)
Financial assumptions changes	-	-	-	1,118	29	1,147
Experience adjustments	-	-	-	(250)	(621)	(871)
Benefits paid during the year	(2,756)	(505)	(3,261)	-	(227)	(227)
<b>Defined benefit obligation at end of year</b>	<b>43,131</b>	<b>4,714</b>	<b>47,845</b>	<b>38,794</b>	<b>3,966</b>	<b>42,760</b>

Line items in profit or loss under which long-term employee benefit expenses are recognised are follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Current service cost	9,233	8,460	7,432	6,926
Interest cost	1,076	1,034	914	913
Actuarial gain	-	(838)	-	(711)
Total expenses recognised in profit or loss	10,309	8,656	8,346	7,128

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Cost of sales	4,512	3,086	3,404	2,504
Administrative expenses	5,797	5,570	4,942	4,624
Total expenses recognised in profit or loss	10,309	8,656	8,346	7,128

The Company and its subsidiaries expect to pay Baht 5 million of long-term employee benefits during the next year (the Company only: Baht 5 million) (2017: Baht 3 million, the Company only: Baht 3 million).

As at 31 December 2018, the weighted average duration of the liabilities for long-term employee benefit is 9 years (the Company only: 9 years) (2017: 9 years, the Company only: 9 years).

Key actuarial assumptions used for the valuation are as follows:

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Discount rate (percent per annum)	2.28 - 2.43	2.28 - 2.43	2.28	2.28
Future salary increase rate (percent per annum)	5.00	5.00	5.00	5.00
Staff turnover rate (depending on age) (percent per annum)	0.00 - 20.00	0.00 - 20.00	0.00 - 20.00	0.00 - 20.00
Gold price (Baht)	20,600	20,600	20,600	20,600

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2018 and 2017 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements			
	As at 31 December 2018		As at 31 December 2017	
	Increase	Decrease	Increase	Decrease
Discount rate (1.0%)	(4.0)	4.6	(3.4)	3.9
Salary increase rate (1.0%)	4.8	(4.3)	3.7	(3.3)
Turnover rate (1.0%)	(4.3)	1.6	(3.7)	1.4
Gold price (1,000 Baht)	0.2	(0.2)	0.1	(0.1)

(Unit: Million Baht)

	Separate financial statements			
	As at 31 December 2018		As at 31 December 2017	
	Increase	Decrease	Increase	Decrease
Discount rate (1.0%)	(3.3)	3.8	(2.9)	3.3
Salary increase rate (1.0%)	4.0	(3.6)	3.1	(2.8)
Turnover rate (1.0%)	(3.6)	1.4	(3.1)	1.2
Gold price (1,000 Baht)	0.1	(0.1)	0.1	(0.1)

On 13 December 2018, The National Legislative Assembly passed a resolution approving the draft of a new Labour Protection Act, which is in the process being published in the Royal Gazette. The new Labour Protection Act stipulates additional legal severance pay rates for employees who have worked for an uninterrupted period of twenty years or more. Such employees are entitled to receive not less than 400 days' compensation at the latest wage rate. This change is considered a post-employment benefits plan amendment and the Company and its subsidiaries have additional liabilities for long-term employee benefits of Baht 9 million (The Company only: Baht 8 million). The Company and its subsidiaries will reflect the effect of the change by recognising past services costs as expenses in the income statement of the period in which the law is effective.

## 26. Share capital

Movements in the number of ordinary shares, the paid-up share capital and premium on ordinary shares are as follows:

Description	Number of shares	Amount	Premium on ordinary shares	Registration date with the Ministry of Commerce
	(Thousand shares)	(Thousand shares)	(Thousand shares)	
<b>Registered share capital</b>				
At the beginning of the year	5,869,698	733,712		
Decrease during the year	(5)	(1)		23 May 2018
Increase during the year	293,485	36,686		25 May 2018
At the end of the year	6,163,178	770,397		
<b>Issued and paid-up share capital</b>				
At the beginning of the year	5,869,693	733,712	1,041,740	
Increase in capital from stock dividend	293,473	36,684	-	30 May 2018
At the end of the year	6,163,166	770,396	1,041,740	

On 27 April 2018, the Annual General Meeting of the Company's shareholders passed the following significant resolutions:

- 26.1 Approved a stock dividend with a total value of up to 293.5 million ordinary shares with a par value of Baht 0.125 per share to be distributed at a rate of 1 dividend share for every 20 existing shares, equivalent to a dividend of Baht 0.00625 per share.
- 26.2 Approved a decrease in the registered capital of the Company from Baht 733.7123 million to Baht 733.7117 million consisting of 5,869.7 million shares with a par value of Baht 0.125 each, by cancelling the Company's unissued ordinary shares. The Company registered the decrease of its registered capital at the Ministry of Commerce on 23 May 2018.
- 26.3 Approved an increase in the registered capital from Baht 733.7 million to Baht 770.4 million through the issuance of an additional 293.5 million ordinary shares with a par value of Baht 0.125 each, to be reserved for the distribution of the stock dividend. On 25 May 2018, the Company registered with the Ministry of Commerce the increase in its registered capital to Baht 770.4 million, or 6,163.2 million shares, which it issued and paid-up capital to Baht 733.7 million, or 5,869.7 million shares.

## 27. Statutory reserve

### The Company

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5% of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10% of the registered capital. The statutory reserve is not available for dividend distribution.

### Local subsidiaries

According to the Thai Civil and Commercial Code, the subsidiaries are required to set aside to a statutory reserve an amount equal to at least 5% of its net profit each time the Company pays out a dividend, until such reserve reaches 10% of its registered share capital. The statutory reserve cannot be used for dividend payment.

## Overseas subsidiaries

According to the Civil and Commercial Code, the subsidiaries are required to set aside to a statutory reserve an amount equal to at least 10% of its net profit until such reserve reach one-third of the Company's capital.

## 28. Expenses by nature

Significant expenses by nature are as follow:

(Unit: Thousand Baht)				
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Salary and wages and other employee benefits	484,114	437,036	421,705	394,294
Depreciation	110,553	104,193	98,726	94,711
Amortisation expenses	2,318	2,258	2,235	2,179
Construction materials and consumables used and subcontractors costs	1,515,632	1,904,586	846,768	644,086
Rental expenses from operating lease Agreements	109,301	81,648	88,065	77,010
(Gain) Loss on exchange rate	10,874	13,573	(111)	13,573

## 29. Income tax

Income tax expenses for the years ended 31 December 2018 and 2017 are made up as follows:

(Unit: Thousand Baht)				
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Current income tax:</b>				
Current corporate income tax charge	32,904	36,205	-	24,692
<b>Deferred tax:</b>				
Relating to origination and reversal of temporary differences	(605)	21,601	1,271	(611)
<b>Income tax expense reported in the statement of income</b>	<u>32,299</u>	<u>57,806</u>	<u>1,271</u>	<u>24,081</u>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2018 and 2017 are as follows:

(Unit: Thousand Baht)				
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Deferred tax relating to actuarial gain or loss on long-term employee benefits	-	(347)	-	(152)
	<u>-</u>	<u>(347)</u>	<u>-</u>	<u>(152)</u>

Reconciliation between income tax expenses and the product of accounting profit multiplied by the applicable tax rates for the years ended 31 December 2018 and 2017 are as follows.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Accounting profit (loss) before tax	(2,010,131)	148,476	(2,327,417)	125,987
Applicable tax rate	12% - 20%	12% - 20%	20%	20%
Accounting profit (loss) before tax multiplied by applicable tax rate	(342,790)	30,222	(465,483)	25,197
Tax effect of intercompany transactions	1,778	(15,827)	-	-
Effects of:				
Non-deductible expenses	261,964	3,148	377,751	1,910
Additional expense deductions allowed	(2,819)	(3,005)	(2,812)	(2,996)
Tax exempted income	-	(55)	-	(30)
Loss on change in shareholders' equity of associate	-	7,000	-	-
Share of loss from investment in associate	9,478	6,868	-	-
Share of (gain) loss from investment in joint venture	(393)	23	-	-
Unused tax losses which may net utilise	105,081	29,432	91,815	-
Total	373,311	43,411	466,754	(1,116)
<b>Income tax expenses reported in the statement of income</b>	<b>32,299</b>	<b>57,806</b>	<b>1,271</b>	<b>24,081</b>

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

(Unit: Thousand Baht)

	Statement of financial position			
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
<b>Deferred tax assets</b>				
Allowance for diminution in value of inventories	476	476	476	476
Provision for liabilities under construction projects	3,230	3,349	594	2,411
Provision for long-term employee benefits	11,291	9,849	9,569	8,552
Unutilised tax loss	-	228	-	-
Total	14,997	13,902	10,639	11,439
<b>Deferred tax liabilities</b>				
Asset under finance lease agreements	1,997	1,507	2,094	1,623
Total	1,997	1,507	2,094	1,623



Corporate income tax of overseas subsidiaries company is calculated at the rate 12% on taxable profit in excess of 30,000 Omani Rial.

As at 31 December 2018, the Company and its subsidiaries has deductible temporary differences totaling Baht 2,142 million (the Company only: Baht 2,137 million) (2017: Baht 235 million, the Company only: Nil), on which deferred tax assets have not been recognised as the Company believes that it may not utilise the temporary differences in the future.

As at 31 December 2018, the Company and its subsidiaries have unused tax losses totaling Baht 467 million, USD 9 million and Omani Rial 1 million (the Company only: Baht 459 million) (2017: USD 4 million and Omani Rial 2 million, the Company only: Nil) will expire by 2023.

### 30. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the year, after adjusting the number of ordinary shares in proportion to the change in the number of shares as a result of the distribution of the stock dividend in accordance with the resolutions of the Annual General Meeting of the Company's shareholders held on 27 April 2018, as discussed in Note 26. The number of ordinary shares of the prior period used for the calculation, as presented for comparative purposes, has been adjusted in proportion to the change in the number of shares, as if the shares comprising such changes had been issued at the beginning of the earliest period reported.

The following table sets forth the computation of basic earnings per share:

	For the periods ended 31 December			
	Consolidated		Separate	
	financial statements		financial statements	
	2018	2017	2018	2017
		(Restated)		(Restated)
Profit (loss) for the year (Thousand Baht)	(2,040,573)	92,792	(2,328,688)	101,906
Weighted average number of ordinary shares (Thousand shares)	6,163,166	6,163,166	6,163,166	6,163,166
Earnings (loss) per share (Baht per share)	(0.331)	0.015	(0.378)	0.017

### 31. Dividends / stock dividends

Dividends / stock dividends	Approved by	Total dividends	Dividend per share
		(Thousand Baht)	(Baht)
Dividend from operations of 2017	Annual General Meeting of the shareholders on 27 April 2018	11,740	0.0020000
Stock dividend from operations of 2017	Annual General Meeting of the shareholders on 27 April 2018	36,684	0.0062500
Total dividend and stock dividend paid in 2018		48,424	0.0082500
Dividend from operations of 2016	Annual General Meeting of the shareholders on 28 April 2017	20,545	0.0040000
Stock dividend from operations of 2016	Annual General Meeting of the shareholders on 28 April 2017	91,713	0.0178571
Total dividend and stock dividend paid in 2017		112,258	0.0218571

### 32. Contracts in progress

As at 31 December 2018, the aggregate amount of construction cost incurred and recognised profits or losses to date for contracts in progress of the Company and its subsidiaries was approximately Baht 12,416 million (the Company only: Baht 8,716 million) (2017: Baht 10,179 million, the Company only: Baht 7,405 million), gross amounts due from customers for contracts in progress were approximately Baht 1,071 million (the Company only: Baht 643 million) (2017: Baht 911 million, the Company only: Baht 406 million), and gross amounts due to customers for contracts in progress were approximately Baht 300 million (the Company only: Baht 25 million) (2017: Baht 371 million, the Company only: Baht 82 million).

### 33. Provident fund

The Company, the subsidiary and their employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. The Company, the subsidiary and their employees contributed to the fund monthly at the rate of 3% - 7% of basic salary. The fund, which is managed by TISCO Asset Management Company Limited, will be paid to employees upon termination in accordance with the fund rules. The contributions for the year 2018 amounting to approximately Baht 8 million (Separate financial statements: Baht 7 million) (2017: Baht 7 million, Separate financial statements: Baht 6 million) were recognised as expenses.

### 34. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Company and its subsidiaries are organized into business units based on its products and services and have four reportable segments as follows:

- Pipeline system construction segment
- Engineering system installation and factory construction for energy and petrochemical business segment
- Civil work construction segment
- Sales and other services

No operating segments have been aggregated to form the above reportable operating segments.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

The following tables present revenue and profit information regarding the Company's and its subsidiaries' operating segments for the year ended 31 December 2018 and 2017, respectively.

(Unit: Thousand Baht)

For the year ended 31 December 2018							
	Pipeline system	Engineering system	Civil work	Sales and other services	Total Segments	Adjustments and eliminations	Consolidated
Revenues from external customers	1,007,816	420,157	812,256	5,725	2,245,954	-	2,245,954
Revenues from subsidiary	-	-	-	370	370	(370)	-
Revenues from associate	-	-	16,420	-	16,420	-	16,420
Depreciation	(68,686)	(29,179)	(10,775)	(3,404)	(112,044)	1,491	(110,553)
Administrative expense	(164,768)	(70,155)	(37,115)	(5,448)	(277,486)	3,372	(274,114)
<b>Segment profit (loss)</b>	<b>82,554</b>	<b>(86,700)</b>	<b>(411,417)</b>	<b>(6,102)</b>	<b>(421,665)</b>	<b>14,521</b>	<b>(407,144)</b>
Other income							41,312
Interest revenue							837
Interest expense							(21,289)
Bad debt and doubtful debt							(365,689)
Loss from impairment on investment in associate							(1,212,731)
Share of loss from investment in associate							(47,389)
Share of profit from investments in joint ventures							1,963
<b>Loss before income tax expense</b>							(2,010,130)
Income tax expense							(32,299)
<b>Loss for the year</b>							<b>(2,042,429)</b>

(Unit: Thousand Baht)

## For the year ended 31 December 2017

	Pipeline system	Engineering system	Civil work	Sales and other services	Total Segments	Adjustments and eliminations	Consolidated
Revenues from external customers	1,073,285	345,446	651,831	-	2,070,562	-	2,070,562
Revenues from subsidiary	-	-	-	2,080	2,080	(2,080)	-
Revenues from associate	-	-	298,171	-	298,171	-	298,171
Revenues from joint venture	1,400	-	-	-	1,400	-	1,400
Depreciation	(67,378)	(7,454)	(30,814)	(8)	(105,654)	1,461	(104,193)
Administrative expense	(187,815)	(23,000)	(90,628)	(1,072)	(302,515)	21	(302,494)
<b>Segment profit (loss)</b>	<b>90,281</b>	<b>35,969</b>	<b>27,663</b>	<b>(911)</b>	<b>153,002</b>	<b>15,503</b>	<b>168,505</b>
Other income							64,354
Interest revenue							1,340
Reversal of allowance for doubtful debt							127
Interest expense							(16,396)
Loss on change in shareholders' equity of associate							(34,992)
Share of loss from investment in associate							(34,337)
Share of loss from investments in joint ventures							(116)
<b>Profit before income tax expense</b>							148,485
Income tax expense							(57,806)
<b>Profit for the year</b>							90,679

## Geographic information

The Company and its subsidiaries operated in Thailand only. As a result, all the revenues and assets as reflected in these financial statements pertain exclusively to this geographical reportable segment.

## Major customers

For the year 2018, the Company and its subsidiaries have revenue from two major customers in amount of Baht 863 million and Baht 256 million, respectively arising from pipeline system segment and engineering system segment (2017: Baht 841 million and Baht 568 million, two major customers from pipeline system segment and civil work segments).

## 35. Commitments and contingent liabilities

### 35.1 Purchase construction materials and subcontracted work commitments

As at 31 December 2018, the Company and the subsidiary have outstanding commitments of Baht 2,683 million and USD 1 million, respectively in respect of purchase construction materials and subcontracted work (the Company only: Baht 167 million and USD 1 million, respectively) (2017: Baht 1,196 million, Euro 40 million and USD 3 million, the Company only: Baht 233 million, Euro 40 million and USD 3 million, respectively).

### 35.2 Operating lease commitments

The Company and its subsidiary have entered into lease agreements in respect of the lease of land, machines, motor vehicles and equipment. The terms of the agreements are generally between 1 and 5 years.

Future minimum lease payments required under these non-cancellable operating leases contracts were as follows.

(Unit: Million Baht)

	As at 31 December			
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Payable:				
In up to 1 year	19	19	17	17
In over 1 and up to 5 years	10	24	9	21

### 35.3 Service agreement commitments

The Company and its subsidiary have entered into service agreements in respect of the consultant and security. The terms of the agreements are generally between 1 and 2 years.

Future minimum lease payments required under these non-cancellable operating leases contracts were as follows.

(Unit: Million Baht)

	As at 31 December			
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Payable:				
In up to 1 year	1	1	1	1

### 35.4 Bank guarantees

The bank guarantees issued by banks on behalf of the Company and its subsidiaries in respect of certain performance bonds as required in the normal course of business were as follows.

	As at 31 December			
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
Guarantee of construction contract and bidding	Baht 1,746 million EUR 1 million	Baht 1,518 million EUR 2 million	Baht 583 million -	Baht 1,101 million EUR 1 million
Guarantee of advance payment bond and retention	Baht 734 million - - -	Baht 1,007 million USD 1 million EUR 3 million SGD 2 million	Baht 142 million - - -	Baht 442 million USD 1 million EUR 1 million SGD 2 million
Guarantee of others	Baht 7 million	Baht 24 million	Baht 6 million	Baht 24 million
Total	Baht 2,487 million - EUR 1 million -	Baht 2,549 million USD 1 million EUR 5 million SGD 2 million	Baht 731 million - - -	Baht 1,567 million USD 1 million EUR 2 million SGD 2 million

As at 31 December 2018, the Company and its subsidiary have outstanding obligation by Baht 2 million (the Company only: Baht 2 million) (2017: Baht 2 million the Company only: Baht 2 million) in respect of bank guarantee provided to the related party.

### 35.5 Guarantees

- (a) As at 31 December 2018, the Company has commitments from guarantee of credit facilities of the subsidiary amounting to Baht 800 million (2017: Baht 700 million) and guarantee of liabilities under finance lease agreements of the subsidiary amounting to Baht 23 million (2017: Baht 23 million).
- (b) As at 31 December 2018, the Company and its subsidiary have commitment from cross guarantee of credit facilities of the Company and its subsidiary amounting to Baht 3,268 million (2017: Baht 2,818 million).

## 36. Litigations

- 36.1 On 6 December 2011, a government agency sent a letter to a bank asking to hold the bank guarantee of Baht 20 million that the Company deposited as the mortgage since the said agency claimed that the Company failed to perform according to the contract.

On 29 December 2011, the Company filed the abovementioned agency and its parties to the Central Administrative Court for the sentence of releasing the captioned bank guarantee with the compensation charge totally Baht 27.5 million plus the interest rate of 7.5% per annum including any related fee from the next day of filing date until completion of payment since the Company considered that such a claim was not caused by the Company's fault on the contrary, the Company could not perform according to the contract due to the law of restricted areas.

On 20 May 2015, the Central Administrative Court had rendered judgement and ordered the government agency to return the Company's Baht 20 million bank guarantee dated 31 August 2007 to the Company under the condition that both the Company and government agency jointly shared the responsibility to pay the total of Baht 10 million plus the interest rate of 7.5% per annum from the next day of filing date (29 December 2011) until completion of payment or within 60 days starting from the date of final judgement whereas all remaining parts to be dismissed.

On 19 June 2015, the government agency made an appeal to the Central Administrative Court and later on 16 October 2015, the Company made an appeal clarification to the court and for ease of reference as of 31 December 2018 and 2017, the Company has already recorded the contingent liabilities of Baht 20 million maybe arisen in the financial statements.

- 36.2 On 24 May 2011, a private company (litigant) filed the case to the Commercial Court against the subsidiary claiming that the subsidiary defaulted the contract with recover damage of Baht 17.5 million plus the interest rate of 7.5% per annum starting from the filing date until completion of payment.

On 21 September 2011, the subsidiary submitted the clarification statement to the Commercial Court by refusing the accusation of the litigant and requested the court for dismissal and also to order the litigant to pay the completed work charge of Baht 10.9 million, according to the contract, to the subsidiary.

On 21 July 2014, the Commercial Court made a sentence to have the subsidiary to pay to the litigant the penalty charge of Baht 11.0 million plus the interest rate of 7.5% per annum starting from the filing date until the completion of payment and cost of execution of Baht 0.1 million for the litigant.

However, the fact for litigation, the subsidiary then submitted an appeal for the Civil Court's judgement to the court.

On 8 July 2015, the subsidiary submitted a request to place the mortgage as per the Civil Court's judgement to waive the judgement execution and the court later ordered on 21 July 2015 that the subsidiary had placed the mortgage as per the report dated 8 July 2015 consisting of a deposit account book and confirmation letter of deposited amount of Baht 15.4 million at Kasikorn Bank Plc. and the certificate of utilisation of land (Nor Sor 3) located at Nongkradorn Sub-district, Muang Nakhonsawan District, Nakhonsawan Province, totally 7 plots of 102 rai, 9 ngan and 289 square wah with the certificate of land appraisal issued by Nakhonsawan Land Office dated 3 July 2015, totally Baht 3.1 million. The court therefore restrained the judgement execution temporarily until the Appeal Court shall issue an order for the request to suspend the execution of the sentence.

On 20 October 2015, the Appeal Court sentenced to vacate judgement of the Civil Court to dispose of the case in order for both plaintiff and defendant to settle their dispute through institutional arbitration and the executing officer later issued the withdrawal order of sequestration on 28 October 2015.

On 12 November 2015, the court ordered to return the mortgage and pay the appeal fee of Baht 0.2 million including the related fee of Baht 0.3 million to the subsidiary.

On 19 November 2015, the litigant submitted a petition whereas on 28 January 2016, the subsidiary also submitted a petition to the Supreme Court, respectively. On 13 September 2016, the Supreme Court rendered judgement to dismiss the lawsuit since the Commercial Court had no authority to consider and also advised the plaintiff to proceed the dispute through institutional arbitration.

On 16 January 2017, the litigant, had submitted the requirement to the arbitral institution for claiming that the subsidiary to compensate the breach of contract with recover damage of Baht 24.4 million.

On 7 April 2017, the subsidiary filed an objection against the requirement of the litigant and later on 20 April 2017, the institutional arbitration accepted the subsidiary's objection and proceeds to submit the objection to the litigant.



On 21 March 2018, the arbitral institution ordered the subsidiary and the Party to define the dispute and scheduled the date of taking evidence to be during June to November 2018.

On 24 December 2018, the subsidiary submitted the closing statement to arbitration within the due date and currently remains under the final decision.

Since the mentioned case is not yet finalised. The subsidiary believed that the subsidiary's the fact and the matter of law can defend against the Party. The management of the subsidiary believes this case will be dismissed and that there will be no significant impact to the subsidiary's financial position. Therefore, the subsidiary has not yet recognised provision for contingent liabilities in the financial statements.

- 36.3 On 4 December 2007, the subsidiary filed a suit to the Central Administrative Court against a government agency (litigant) in order for payment of a penalty charge of Baht 13.4 million for termination of construction contract by deducting the advance payment of Baht 7.7 million as per the contract and the total of penalty charge to be paid Baht 6.1 million plus the interest rate of 7.5% per annum starting from the filing date until the completion of payment. However, the litigant submitted its pleading to the court on 20 August 2008 claiming that the amount of the penalty charge was overrated and the third resolution of the Compensation Committee was made on 16 July 2008 to order the government agency to pay the compensation of Baht 0.8 million to the subsidiary whereas ordered the subsidiary to return the amount of Baht 6.8 million to the government agency, respectively.

After that, several amendments to the petition and pleadings of both parties were made.

On 20 April 2010, the litigant submitted its latest amended pleadings to the Central Administrative Court about the fee of the advance payment bank guarantee of Baht 0.1 million and the litigant asked the court for dismissal and order the subsidiary to return the litigant the advance amount of Baht 7.7 million in order to proceed as per the construction contract.

The subsidiary submitted its latest amended pleadings to the court on 24 January 2012 requesting the court to render judgement ordering the litigant to bring the compensation amount of Baht 19.4 million to be deducted by the amount of Baht 7.7 million advanced to the subsidiary to proceed as per the construction contract as well as paying the penalty charge of Baht 12.5 million to the subsidiary plus the interest rate of 7.5% per annum starting from the filing date until the completion of payment.

The litigant submitted its refusal pleadings and asked the court for dismissal and returning of the aforementioned advance payment amount as well.

On 31 July 2012, the court rendered judgement ordering the subsidiary to receive Baht 3.3 million and also return Baht 4.4 million to the litigant. The subsidiary then submitted its appeal for the judgement to the Supreme Administrative Court on 29 August 2012.

Since this case remains under the consideration, the subsidiary has not yet been recorded in financial statements.

- 36.4 On 24 April 2008, a private company and its partner (litigant) filed suit to the Administrative Court of First Instance against the Company and its partner on violation against the contract and sued for damages of Baht 6 million plus the interest rate of 7.5% per annum starting from the filing date until completion of payment.

On 29 May 2012, the court rendered judgement of dismissal but later on 20 June 2013, the litigant appealed to the Supreme Administrative Court and on 9 August 2013, the Company submitted an amendment of appeal requesting for the dismissal.

Since this case remains under the consideration of the Supreme Administrative Court and since the Company's management has confidence that the Company will not gain any significant loss (if any) from this litigation, any provision of liabilities then have not yet been recorded in financial statements.

36.5 On 14 September 2015, the plaintiff (the litigant) filed a lawsuit against a government agency and 8 co-defendants to the Administrative Court for compensation of damages from loss of income of Baht 87.5 million. The Company is sued as the fifth defendant on 11 March 2016 and then on 28 October 2016, submitted an objection against the plaintiff's request to waive the court fee.

On 12 January 2017, the Company has just submitted the statement of defence to the court and the court ordered the Company to submit the additional statement within 30 days.

During 7 February 2017 to 31 March 2017 the Company had requested to extend the submission of the additional clarification to the Administration Court and later on 4 April 2017, the Administrative Court had ordered to the Company to submit the additional clarification within 12 May 2017. On 12 June 2017, the Company submitted the additional statement to the Administration Court.

On 9 January 2019, the Administrative Court ordered the date of 31 January 2019 is the last day of investigation.

Since this case has been remained under Consideration of the Administrative Court, the Company's management has confidence that the Company will not gain any significant loss (if any) from this litigation, any provision of liabilities then have not yet been recorded in the financial statements.

36.6 On 6 December 2017, the co-contractor of the Company's construction project had filed a lawsuit to the arbitrator requesting the Company to return the collateral held at the amount of SGD 1.6 million or equivalent to Baht 39.4 million with interest rate of 7.5% per annum starting from the filing date until completion of payment. On 21 June 2018, the arbitral Institution had announced the appointment of the chairman of arbitration. On 17 July 2018, the Company and the Party were present before the arbitrator for determination of the dispute and the date of taking evidence.

On 22 November 2018, the witness examination was completely made by the arbitration and both parties.

On 23 January 2019, both parties submitted their closing statements within the due date for final decision of the arbitration.

Since the mentioned case is not yet finalised. The Company believed that the Company's the fact and the matter of law can defend against the Party. Therefore, the Company has not yet recognised provision for contingent liabilities in the financial statements.

36.7 On 5 February 2018, the supplier for the Company's construction project had filed a lawsuit to the Commercial Court requesting for material payment of outstanding amount of Baht 23.5 million with interest rate of 7.5% per annum starting from filing date until completion of payment. On 16 May 2018, the Company submitted the testimony to the Court and the mediation was conducted on 28 August 2018 but could not come to an agreement. On 1 October 2018, the Court ordered the Company and the Party to determine the dispute and scheduled the date of taking evidence from both parties in March 2019.

Since the case remains under the process of answering preparation with all related supporting documents to be submitted to the court for a dispute testimony and the captioned outstanding amount has been already recorded in the financial statements, the additional reserve for this liability was then not required to be provided.

36.8 On 16 October 2017, the Nakhon Ratchasima Administrative Court accepted a case between a litigant and the government agencies, requesting the Court to issue an order as relating to the following;

- 1) Requesting that the government agencies revoke the permission to use the water from a reservoir that had been granted to the associate
- 2) Requesting the revocation of the Environmental Impact Assessment Report for the associate's potash and rock salt mining, and
- 3) Requesting the revocation the report on changes in project details and the associate's environmental impact prevention and amelioration measures, the environmental impact prevention and amelioration measure, environmental impact inspection measure.

On 15 January 2018 the Nakhon Ratchasima Administrative Court issued a summons to the associate and the associate submitted a plea statement to the Court, and on 19 October 2018 the litigant filed an objection against the plea statement with the Nakhon Ratchasima Administrative Court. On 2 November 2018 the Nakhon Ratchasima Administrative Court ordered the associate to lodge an additional plea statement. On 28 November 2018, the associate had submitted additional plea statement to the Court request extension the term for additional plea statement by 30 days from the original due date.

On 27 December 2018, the associate had submitted the additional statement to the Nakhon Ratchasima Administrative Court. At present, the case is under consideration of the Court. If the Court considers the evidence documents are insufficient, the Court may order the plaintiff or the defendant to provide additional documents otherwise the court shall issue the appointment warrant to identify the disputes and determine the judgement date.

The management of the associate, by the internal legal counselor comment, realised that the associate has proceeded in full compliance with the principles, procedures and conditions stipulated by the law and therefore believes that the case will have any material impact to the business of the associate.

- 36.9 On 28 June 2018, the Nakhon Ratchasima Administrative Court had ordered to accept the complaint between a litigant and government agencies, requesting the Court to issue an orders to revoke the environmental impact assessment report for the Cogeneration Power Plant for the associate's Potash and rock salt project.

On 11 October 2018, the associate had submitted the claim to be the disputant in order to declare the fact to the Court regarding the litigation between the litigant and the government agencies. The Court had opined on 1 November 2018 that the associate claim is not complete then the Court had ordered the associate to rectify the claim. The associate had already been submitted the revised claim to the Court on 28 November 2018. At present, the case is under consideration of the Court.

The management of the associate, by the internal legal counselor comment, realised that the associate has proceeded in full compliance with the principles, procedures and conditions stipulated by the law and therefore believes that the case will have any material impact to the business of the associate.

### 37. Fair value hierarchy

As at 31 December 2018 and 2017, the Company and its subsidiaries had the assets and liabilities that were measured at fair value using different levels of inputs as follows:

(Unit: Million Baht)

	Consolidated Financial Statements							
	As at 31 December 2018				As at 31 December 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>								
Investment in mutual fund	-	-	-	-	-	135.9	-	135.9
<b>Liabilities for which fair value are disclosed</b>								
Debentures	-	180.3	-	180.3	-	299.7	-	299.7
Derivatives								
Foreign currency forward contracts	-	-	-	-	-	(0.7)	-	(0.7)

(Unit: Million Baht)

	Separate Financial Statements							
	As at 31 December 2018				As at 31 December 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Liabilities for which fair value are disclosed</b>								
Debentures	-	180.3	-	180.3	-	299.7	-	299.7
Derivatives								
Foreign currency forward contracts	-	-	-	-	-	(0.7)	-	(0.7)

## 38. Financial instruments

### 38.1 Financial risk management

The Company's and its subsidiaries' financial instruments, as defined under Thai Accounting Standard No.107 "Financial Instruments: Disclosure and Presentations", principally comprise cash and cash equivalents, trade and other receivables, accounts receivable/payable - retention, loans to/from, restricted deposits at banks, trade and other payables, liabilities under finance lease agreements, and debentures. The financial risks associated with these financial instruments and how they are managed is described below.

#### Credit risk

The Company and its subsidiaries are exposed to credit risk primarily with respect to trade and other receivables, and loans to. The Company and its subsidiaries manage the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. The maximum exposure to credit risk is limited to the carrying amounts of trade accounts receivables, other receivable and loans to as stated in the statement of financial position.

## Interest rate risk

The Company and its subsidiaries exposure to interest rate risk relates primarily to its deposits at banks, loans to/from, liabilities under finance lease agreements and debentures. However, since most of the Company and its subsidiaries' financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the market rate, the interest rate risk is expected to be minimal.

As at 31 December 2018 and 2017, Significant financial assets and liabilities classified by type of interest rates are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date if this occurs before the maturity date.

(Unit: Million Baht)

	Consolidated financial statements					
	As at 31 December 2018					
	Fixed interest rates		Floating interest rate	Non - interest bearing	Total	Effective interest rate (percent per annum)
	within 1 year	1 - 5 years				
Financial Assets						
Cash and cash equivalents	-	-	80	2	82	0.10 - 1.30
Trade and other receivables	-	-	-	715	715	-
Accounts receivable - retention under construction contracts	-	-	-	103	103	-
Restricted deposits at banks	1	-	15	-	16	0.45 - 1.30
	1	-	95	820	916	
Financial liabilities						
Bank overdrafts and short-term loans from banks	582	-	-	-	582	3.00 - 6.87
Trade and other payables	-	-	-	744	744	-
Accounts payable – retention under construction contracts	-	-	-	45	45	-
Liabilities under finance lease agreements	4	2	-	-	6	5.02 - 5.03
Debentures	179	-	-	-	179	4.80
	765	2	-	789	1,556	

(Unit: Million Baht)

	Consolidated financial statements					
	As at 31 December 2017					
	Fixed interest rates		Floating interest rate	Non - interest bearing	Total	Effective interest rate (% per annum)
	within 1 year	1 - 5 years				
<b>Financial Assets</b>						
Cash and cash equivalents	-	-	19	317	336	0.13 - 0.63
Trade and other receivables	-	-	-	826	826	-
Accounts receivable - retention under construction contracts	-	-	-	100	100	-
Restricted deposits at banks	1	-	15	-	16	0.40 - 1.30
	1	-	34	1,243	1,278	
<b>Financial liabilities</b>						
Bank overdrafts and short-term loans from banks	70	-	-	-	70	4.35
Trade and other payables	-	-	-	451	451	-
Accounts payable – retention under construction contracts	-	-	-	49	49	-
Short-term loans	30	-	-	-	30	3.85
Liabilities under finance lease a greements	11	6	-	-	17	4.50 - 5.03
Debentures	300	-	-	-	300	4.40 - 4.50
	411	6	-	500	917	

(Unit: Million Baht)

	Separate financial statements					
	As at 31 December 2018					
	Fixed interest rates		Floating interest rate	Non - interest bearing	Total	Effective interest rate (percent per annum)
	within 1 year	1 - 5 years				
<b>Financial Assets</b>						
Cash and cash equivalents	-	-	6	1	7	0.10 - 1.25
Trade and other receivables	-	-	-	484	484	-
Accounts receivable - retention under construction contracts	-	-	-	49	49	-
	-	-	6	534	540	
<b>Financial liabilities</b>						
Bank overdrafts and short-term loans from banks	480	-	-	-	480	3.00 - 4.60
Trade and other payables	-	-	-	497	497	-
Accounts payable - retention under construction contracts	-	-	-	10	10	-
Short-term loans from related parties	510	-	-	-	510	2.50 - 4.50
Debentures	179	-	-	-	179	4.80
	1,169	-	-	507	1,676	



(Unit: Million Baht)

	Separate financial statements					
	As at 31 December 2017					
	Fixed interest rates		Floating interest rate	Non - interest bearing	Total	Effective interest rate (% per annum)
	within 1 year	1 - 5 years				
Financial Assets						
Cash and cash equivalents	-	-	10	1	11	0.25 - 0.63
Trade and other receivables	-	-	-	853	853	-
Accounts receivable - retention under construction contracts	-	-	-	53	53	-
Loans to related parties	3	1,306	-	-	1,309	3.50 - 7.00
	3	1,306	10	907	2,226	
Financial liabilities						
Bank overdrafts and short-term loans from banks	70	-	-	-	70	4.35
Trade and other payables	-	-	-	220	220	-
Accounts payable - retention under construction contracts	-	-	-	12	12	-
Short-term loans	30	-	-	-	30	3.85
Short-term loans from related parties	98	-	-	-	98	2.50
Liabilities under finance lease agreements	7	-	-	-	7	4.50 - 5.03
Debentures	300	-	-	-	300	4.40 - 4.50
	505	-	-	232	737	

### Foreign currency risk

The Company and its subsidiary's exposure to foreign currency risk arises mainly from buying and services transactions and borrowings that are denominated in foreign currencies. In certain circumstances, the Company and its subsidiaries enter into forward exchange contracts when it considers appropriate.

As at 31 December 2018 and 2017, the material balances of financial assets and liabilities denominated in foreign currencies are summarised below.

Consolidated financial statements						
Foreign currency	Financial assets as at 31 December		Financial liabilities as at 31 December		Average exchange rate as at 31 December	
	2018	2017	2018	2017	2018	2017
	(Thousand)	(Thousand)	(Thousand)	(Thousand)	(Baht per 1 foreign currency unit)	
US dollar	610	1,260	504	112	32.4498	32.6809
Euro	2	4,824	126	123	37.1252	39.0273

Separate financial statements						
Foreign currency	Financial assets as at 31 December		Financial liabilities as at 31 December		Average exchange rate as at 31 December	
	2018	2017	2018	2017	2018	2017
	(Thousand)	(Thousand)	(Thousand)	(Thousand)	(Baht per 1 foreign currency unit)	
US dollar	638	1,277	504	112	32.4498	32.6809
Euro	1	2	90	90	37.1252	39.0273
Omani Rial	-	26	-	-	84.2852	84.8855

As at 31 December 2018 and 2017, foreign exchange contracts outstanding are summarised below.

Consolidated / separate financial statements						
Foreign currency	Bought amount as at 31 December		Contractual exchange rate as at 31 December		Contractual maturity date as at 31 December	
	2018	2017	2018	2017	2018	2017
	(Million)	(Million)	(Baht per 1 foreign currency unit)			
Euro	-	3.5	-	38.63 - 39.43	-	January 2018 - June 2018

## 38.2 Fair values of financial instruments

The methods and assumptions used by the Company in estimating the fair value of financial instruments are as follows:

- For financial assets and liabilities which have short-term maturity, including cash and cash equivalents, trade and other receivables, accounts receivable/payable - retention, loans to/from, trade and other payables, liabilities under finance lease agreements, their carrying amounts in the statement of financial position approximate their fair value.
- For fixed rate debenture, their fair value is estimated by discounting expected future cash flow by the current market interest rate of the debenture with similar terms and conditions.
- For derivatives, their fair value has been determined by using a discounted future cash flow model and a valuation model technique. Most of the inputs used for the valuation are observable in the relevant market, such as spot rates of foreign currencies, yield curves of the respective currencies.

During the current year, there were no transfers within the fair value hierarchy.

The fair values of the Company and its subsidiaries' financial instruments are estimated to approximately the amounts presented in the statements of financial position, except for the following:

(Unit: Million Baht)

	As at 31 December 2018		As at 31 December 2017	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial liabilities</b>				
Debentures	179.7	180.3	300.0	299.7

The estimated fair value of the derivatives is as follows:

(Unit: Million)

	Fair value as at 31 December			
	Consolidated financial statements		Separate financial statements	
	2018	2017	2018	2017
	Gain (loss)	Gain (loss)	Gain (loss)	Gain (loss)
<b>Derivatives</b>				
Foreign currency forward contracts	-	0.7	-	0.7

### 39. Capital management

The primary objective of the Company's capital management is to ensure that it has an appropriate capital structure to support its business and maximise shareholder value. As at 31 December 2018, the Group's debt-to-equity ratio was 3.35:1 (2017: 0.67:1) and the Company's was 3.88:1 (2017: 0.41:1).

### 40. Event after the reporting period

On 15 January 2019, the meeting No.1/2019 of the Company's Board of Directors passed its resolution to issue the corporate guarantee to the subsidiary for project finance loan facilities obtained from the bank at the amount of Baht 1,383 million.

### 41. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 25 February 2019.



**TRC CONSTRUCTION PLC**

บริษัท ทีอาร์ซี คอนสตรัคชั่น จำกัด (มหาชน)



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