



KTIS
More Than Sugar

*THE PROSPERITY
OF SUGARCANE
SUPPLY CHAIN*

ANNUAL REPORT 2019
รายงานประจำปี 2562



KTIS

More Than Sugar

Contents

Corporate Philosophy Vision and Mission	5	
	6	Financial Highlights
General Information and Other Information	8	
	13	Messages from the Chairman
Messages from the Chief Executive Officer – KTIS Group	15	
	16	Board of Director
Directors and Management Biography	18	
	39	Business Overview
Nature of Business	46	
	66	Risk Factors
Securities Details and Shareholding Structure	71	
	76	Management Structure
Corporate Governance	109	
	133	Corporate Social Responsibility
Internal Control and Risk Management	145	
	148	Report of the Audit Committee
Related Transactions	150	
	163	Management Discussion & Analysis
Declaration of the Directors' Responsibility for the Financial Statements	171	
	178	Annual Financial Statement



KTIS
More Than Sugar

Corporate Philosophy

**The sustainability of KTIS
is dependent on the success
of sugarcane farmers**

Vision

KTIS Group is a leading organization with an outstanding world-class identity. It has maintained good governance, integrated closely with agricultural and industrial industry, maintained social awareness, added values and quality to sugar and its by products, and utilized clean and eco-friendly energy to sustain stability.

Mission

The company operates its businesses with keen knowledge and experiences, creative ideas and professionalism in order to generate innovation and value to its products and services ranging from upstream to downstream.

The company creates a sustainable source of raw materials in order to support a fully integrated business network for the production of high-quality products as well as the generation of clean and eco-friendly biomass energy.

The company conducts its business with high ethics and integrity while maintaining good governance in both existing and new business investments for valuable return in both financial and non-financial forms back to the community, investors, customers, employees, farmers and stakeholders.

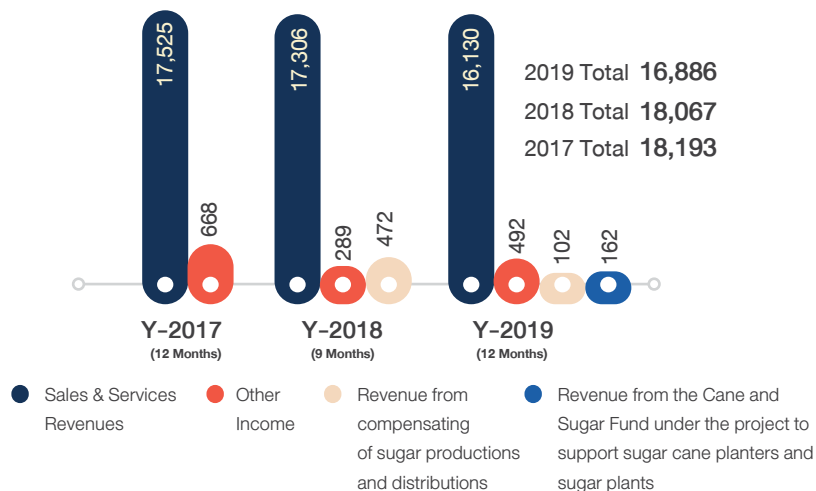
Financial Hilight

	Y2017 (12 Months)	Y2018 (9 Months)	Y2019 (12 Months)
Income Statements (Million Baht)			
Sales & Services Revenues	17,525	17,306	16,130
Sugar	13,062	12,219	10,484
Molasses	443	838	623
Electricity	584	1,217	1,310
Ethanol	1,654	1,313	1,619
Pulp	1,261	1,131	1,457
Others	521	588	637
Revenue from compensating of sugar productions and distributions	-	472	102
Revenue from the Cane and Sugar Fund under the project to support sugar cane planters and sugar plants	-	0	162
Other Income	668	289	492
Total Revenues	18,193	18,067	16,886
Net Profit	645	629	740
Balance Sheet (Million Baht)			
Total Assets	17,816	18,358	19,120
Current Assets	6,201	6,968	7,709
Non-Current Assets	11,615	11,390	11,411
Total Liabilities	9,704	10,164	10,778
Current Liabilities	5,584	6,314	7,593
Non-Current Liabilities	4,120	3,851	3,185
Total Shareholders's Equities	8,112	8,194	8,342
Ratio (Times)			
Current Ratio	1.11	1.10	1.02
D/E	1.20	1.24	1.29

3 Years Financial Hilight

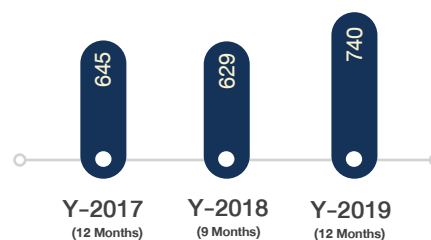
Total Revenues

Unit : Baht million

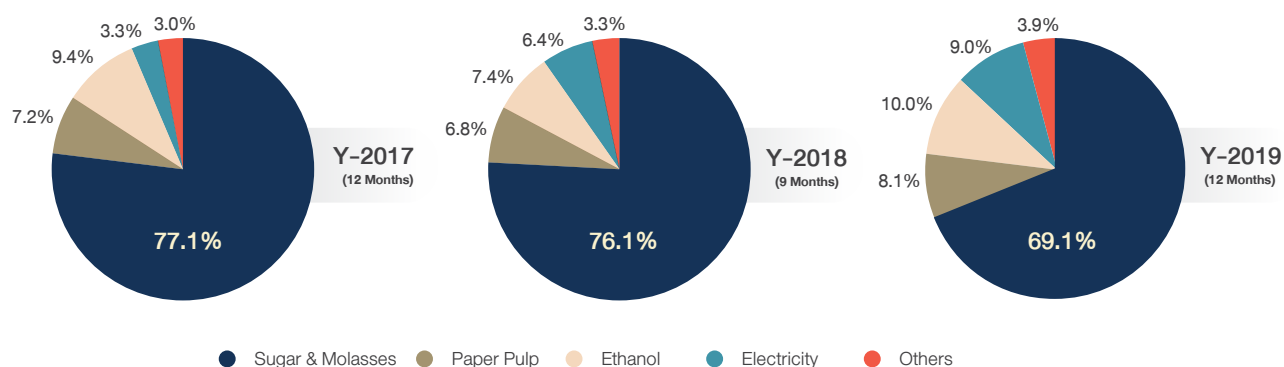


Net Profit

Unit : Baht million

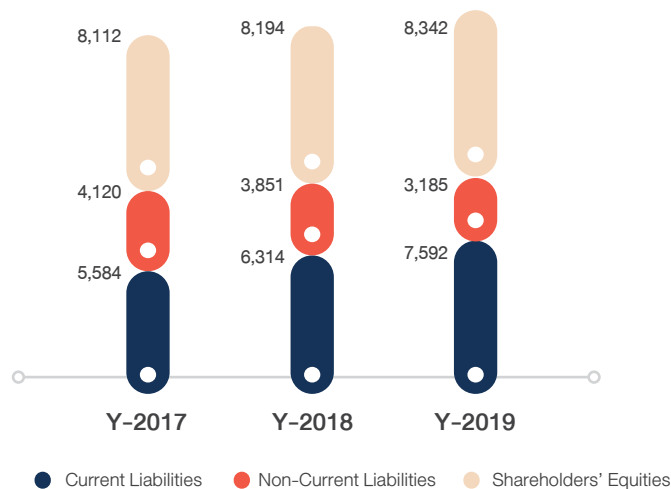


Sales & Service Revenue



Balance Sheet

Unit : Baht million



Current Ratio

Unit : Times



D/E Ratio

Unit : Times



2017 Total 17,816 2018 Total 18,358 2019 Total 19,120

General Information and Other Information

Company Information

Company Information	:	Kaset Thai International Sugar Corporation Public Company Limited (the“Company”)
Type of Business	:	Production and distribution of sugar and connected secondary businesses such as the production and distribution of bleached white paper pulp, ethanol and electricity
BKK office	:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Head office and Factory	:	1/1 Moo 14 Nong Pho Sub-District, Taklee District, Nakhonsawan Province, Thailand
Factory (Branch 3)	:	1 Moo 7 Banmakhua Sub-District, Muang District, Nakhonsawan Province, Thailand
Registration number	:	0107556000116
Telephone	:	(66) 2692-0869 to 73
Facsimile	:	(66) 2246-9125 , (66) 2692-0876 , (66) 2246-9140
Homepage	:	www.ktisgroup.com
Company Secretary	:	Mr.Poomrerk Wangpreedalertkul Tel. (66) 2692-0869 to 73 ext. 175
Email	:	cs@ktisgroup.com
Investor Relations and Corporate Communications	:	Ms.Monathy Ploisook Tel. (66) 2692-0869 to 73 ext. 193 ext. 26
E-mail	:	ir@ktisgroup.com
Registered capital	:	3,888,000,010 Baht
Paid up Registered Capital	:	3,860,000,010 Baht

Subsidiary Information

Sugar Business:	Thai Identity Sugar Factory Co., Ltd.
Business Type:	Production and distribution of sugar
Registered Share Capital	1,215,000,000 Baht
Paid-up Share Capital	1,215,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Factory:	42/1 Moo 8 Ban Hardsuatan, Kungtapao Sub-District, Muang District, Uttaradit Province Telephone (66) 5544-9010 to 1, (66) 5540-7241
Paper Pulp Business:	Environment Pulp and Packaging Co.,Ltd
Business Type:	Production and distribution of bleached paper pulp
Registered Share Capital	650,000,000 Baht
Paid-up Share Capital	650,000,000 Baht
BKK office:	(1) 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73 (2) 133 Vibhavadi Rangsit Rd., Samsennai, Phayathai, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	888 Moo 1 Nong Pho Sub-District, Taklee District, Nakhonsawan Province Telephone (66) 56-338-338, (66) 62-310-0314 to 6



Energy Business:	Kaset Thai Bio Power Co., Ltd.
Business Type:	Production and distribution of electricity
Registered Share Capital	1,260,000,000 Baht
Paid-up Share Capital	1,260,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	555 Moo 14 Nong Pho Sub-District, Taklee District, Nakhonsawan Province Telephone (66) 62-310-0311 to 5 ext 200
Energy Business:	Ruamphol Bio Power Co.,Ltd
Business Type:	Production and distribution of electricity
Registered Share Capital	395,000,000 Baht
Paid-up Share Capital	395,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	128 Moo 7 Banmakhua Sub-District, Muang District, Nakhonsawan Province Telephone (66) 56-207-225 to 8
Energy Business:	Thaiekaluck Power Co.,Ltd
Business Type:	Production and distribution of electricity
Registered Share Capital	350,000,000 Baht
Paid-up Share Capital	350,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	42/2 Moo 8 Ban Hardsuatan, Kungtapao Sub-District, Muang District, Uttaradit Province Telephone (66) 55-449-010 to 1 , (66) 55-407-241
Energy Business:	Lopburi Biopower Co.,Ltd
Business Type:	Production and distribution of electricity
Registered Share Capital	2,000,000 Baht
Paid-up Share Capital	2,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Energy Business:	KTIS Biogas Power Co.,Ltd
Business Type:	Production and distribution of electricity
Registered Share Capital	1,000,000 Baht
Paid-up Share Capital	1,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Energy Business:	Environment Pulp and Paper Co., Ltd.
Business Type:	Production and distribution of bleached paper pulp
Registered Share Capital	2,400,000,000 Baht
Paid-up Share Capital	2,400,000,000 Baht
BKK office:	(1) 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73 (2) 133 Vibhavadi Rangsit Rd., Samsennai, Phayathai, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	9/9 Moo 1 Attavipach Rd., Nong Pho Sub-District, Taklee District, Nakhonsawan Province Telephone (66) 56-338-338, (66) 62-310-0314 to 6
Fertilizer Business:	KTIS Bio Fertiliser Co.,Ltd
Business Type:	Production and distribution of fertilizers and soil
Registered Share Capital	35,000,000 Baht
Paid-up Share Capital	35,000,000 Baht
BKK office:	24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok Telephone (66) 2692-0869 to 73
Factory: :	888 moo 14 Nong Pho Sub-District, Taklee District, Nakhonsawan Province Telephone (66) 93-182-0800

Energy Business: **KTIS Bioethanol Co., Ltd.**

Business Type: Production and distribution of ethanol

Registered Share Capital 256,000,000 Baht

Paid-up Share Capital 256,000,000 Baht

BKK office: (1) 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73
(2) 133 Vibhavadi Rangsit Rd., Samsennai, Phayathai, Bangkok
Telephone (66) 2692-0869 to 73

Factory: : 9 Moo 14 Nong Pho Sub-District, Taklee District, Nakhonsawan Province
Telephone (66) 62-310-2406

Energy Business: **KTIS Bio Energy Co.,Ltd**

Business Type: Production and distribution of ethanol

Registered Share Capital 20,000,000 Baht

Paid-up Share Capital 20,000,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Energy Business: **Lopburi Bioethanol Co.,Ltd**

Business Type: Production and distribution of ethanol

Registered Share Capital 50,000,000 Baht

Paid-up Share Capital 12,500,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Holding Business: **Permsinpattana Co., Ltd.**

Business Type: Shareholders engagement, which currently holds 26.0 per cent in EPPCO

Registered Share Capital 317,000,000 Baht

Paid-up Share Capital 317,000,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Property Business: **Sapsirikaset Co.,Ltd**

Business Type: Real estate investment

Registered Share Capital 311,000,000 Baht

Paid-up Share Capital 311,000,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Asset management Business: **Kaset Thai Wiwat Co., Ltd.**

Business Type: Support company's asset management

Registered Share Capital 61,000,000 Baht

Paid-up Share Capital 61,000,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Support and Development Business: **KTIS Research and Development Co., Ltd.**

Business Type: Support company's businesses and its growth aspiration.

Registered Share Capital 20,000,000 Baht

Paid-up Share Capital 20,000,000 Baht

BKK office: 24 Aekphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng, Bangkok
Telephone (66) 2692-0869 to 73

Factory: 99 Moo 14 Nong Pho Sub-District, Taklee District, Nakhonsawan Province
Telephone (66) 62-310-2406 ext 133, (66)92-279-9210

Other References

SEC : Securities and Exchange Commission, Thailand

333/3 Vibhavadi Rangsit Road, Chomphon, Chatuchak, Bangkok 10900, Thailand

Telephone : (66) 2695-9999
Facimile : (66) 2695-9660
Email : info@sec.or.th
website : www.sec.or.th

SET : The Stock Exchange of Thailand

93 Ratchadapisek Road., Dindaeng, Bangkok 10400, Thailand.

Telephone : (66) 2009-9000
Facimile : (66) 2009-9991
SET Contact Center : (66) 2009-9999
Email : SETCallCenter@set.or.th
website : www.set.or.th

Registrar : Thailand Securities Depository Co., Ltd.

93 Ratchadapisek Road., Dindaeng, Bangkok 10400, Thailand.

Telephone : (66) 2009-9000
Facimile : (66) 2009-9991
SET Contact Center : (66) 2009-9999
Email : SETContactCenter@set.or.th
website : www.set.or.th/tsd

Auditor : EY Office Limited

137-136/139 Lake Ratchada Office Complex, 33th Floor New Ratchadapisek Road, Klongtoei, Bangkok, 10110, Thailand

Telephone : (66) 2264-0777, (66)2661-9190
Fax : (66) 2264-0789 to 90
Email : ernstyoung.thailand@th.ey.com
website : www.ey.com

Legal Advisor : Kudan and Partners Co.,Ltd

127 Gaysorn Tower, 23th Floor, Unit Ratchdamri Road, Lumpini, Pathumwan, Bangkok, 10330, Thailand

Telephone : (66) 2838-1750
Facimile : (66) 2838-1795





Messages from the Chairman

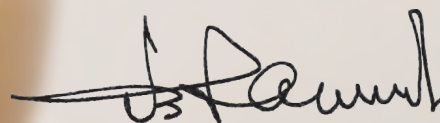
In the passing year, the world economy still was in a fluctuation because of the conflict in international trade between economic superpower countries. The consequence of such conflict affected through the international community and unavoidably affected Thailand who is the important trade partner of such countries, while problem of energy price due to the conflict in the middle east region was also a significant factor of such fluctuation. Moreover, the care for environment from the global community began to take an important step in to business sector, such as the declaration of G20 summit at Osaka, Japan which urged that a paradigm shift is needed where the virtuous cycle of environment and growth is accelerated through innovations, and with business communities playing an important role, in synergy with the public sector. It emphasized that the business strategy of KTIS group which focuses on environment-friendly industries is conforming with the care of global community.

Thailand's cane yield of this year is expected to moderately decline from the last year due to the drought as well as cane yield in other major sugar export countries like Brazil and India. The situation in bio business section is expected to remain steady due to the trade war. Meanwhile Thai government realized the importance of cane-based industries and issued the policy of bio-economic promotion. The consequence of the promotion will make sugar industry, cane-based industry and sugar cane a significant new economic drive of Thailand in the future.

KTIS group still believes in the policy of the benefit maximization to all stakeholders by the good management of the current businesses and the revenue generation from the new businesses using cane and by products from sugar industry, especially the environment friendly business which serves the dynamical changes of today consumers such as the business of utensils production from bagasse pulp, and serve the need of global community that requires business sector's participation in the promotion of sustainability through innovation, the creation of novel goods and services.

I would like to thank to all stakeholders who have entrusted the board of directors to manage and monitor KTIS group to operate with good governance. I also would like to thank all executives and employees of KTIS group who have been working together with endeavor and have always been pursuing for the development.

I believe that this annual report shall reflect the effort, determination and capability of the executives, employees and cane farmers, and also explicitly reflect the benefit that the group has returned to stakeholders and society.



Mr. Pricha Attavipach

Chairman



Messages from the Chief Executive Officer – KTIS Group

In the passing year, our sugar business was crushing 9.8 million tons of sugar cane in total which is 7.5% of total sugar cane in Thailand, and ranked KTIS group as a sugar business group that has the 4th largest sugar cane crushing capacity in Thailand, and such amount of sugar cane shall ascertain the security of raw material for KTIS bio business sector .

In the passing year, our bio business had a satisfying turnover for both energy and manufacturing sectors. The pulp industry in the next year is expected to be steady due to the steady world demand as the result of the major import countries' domestic factors. The ethanol industry is expected that the domestic consumption will be higher. Moreover, KTIS group also invested in many new projects, the important project for this year is the utensils manufacturing made from bagasse pulp project under the entity named Environment Pulp and Packaging Co., Ltd. or EPAC which shall create high value added products to serve today's variety of demand, and which is an environment friendly business conforming with environmental care emphasized by society.

For the joint investment project with Global Green Chemical Public Co., Ltd. or GGC in the Bio complex project located at Nakhonsawan province, the project will directly produce ethanol from sugar cane and have a biomass powerplant in the first phase. The later phase will be the advancement in bio chemical sector and other advanced

technology sectors. The project has been very well supported from Thai government by the legislation that clarifies the legality of such project and the licenses issuance which facilitates the initiation of the project's construction.

KTIS group always believes in the philosophy "More than sugar" or the value creation beyond sugar. In the passing the Company's operation has reflected the Company has been giving the priority to such philosophy. Further, I would like to notify all stakeholders that even there are many challenges in today's sugar industry, but KTIS group has already prepared to handle such challenges by the improvement of management in our current business and by the exploration for the new opportunities from new businesses. Moreover, our preparation for challenges has always taken into account the benefit and sustainability of Thai and global society.

I would like to thank all stakeholders especially the Company's staff and the cane farmers who made a great contribution to our passing year's success. I believe that the cooperation from all stakeholder will surely be an important force that drives KTIS group to the future.



Mr. Parphan Siriviriyakul
Chief Executive
Officer – KTIS Group

Board of Directors



1. Mr. Pricha Attavipach

- Chairman



5. Mr. Prasert Siriviriyakul

- Director
- Deputy Executive Officer - KTIS group
- Risk Management Committee



2. Mr. Sirivuthi Siamphakdee

- Director
- Chairman of Executive Committee
- Chief Financial Officer - KTIS Group
- Risk Management Committee



6. Mr. Nathapun Siriviriyakul

- Director
- Deputy Executive Officer - KTIS group
- Risk Management Committee



3. Mr. Parphan Siriviriyakul

- Director
- Chief Executive Officer - KTIS Group
- Risk Management Committee



7. Mr. Krairit Nilkuha

- Independent Director
- Chairman of Audit Committee



4. Mrs. Darat Vibhatakalasa

- Director
- Deputy Executive Officer - KTIS group
- Nomination and Remuneration Committee



8. Mr.T-rayooth Changpetch

- Independent Director
- Chairman of Risk Management Committee
- Audit Committee



9. Mr.Issakan Krivithaya

- Independent Director
- Chairman of Nomination and Remuneration Committee
- Risk Management Committee



10. Mr.Sathaporn Kotheeranurak

- Independent Director
- Audit Committee



11. Mr.Phoonsak Boonsalee

- Independent Director
- Nomination and Remuneration Committee



12. Mr.Kunihiro Tahara

- Director



13. Mr.Apichart Noochprayoon

- Director



14. Ms. Chua Eng Eng

- Director



15. Mr.Sirapak Siriviriyakul

- Director

Details of Company's Directors, Executives, Authorized Person and Company Secretary

1

Name : Mr.Pricha Attavipach

Age : 81 Year

Position : Chairman

Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Engineering (Industrial Engineering), Chulalongkorn University
- Master of Engineering (Industrial Engineering & Management), Oklahoma State University
- Director Certification Program (DCP 39/2004)
- Audit Committee Program (ACP 11/2006)
- Finance for Non-Finance Director (FND 8/2004)
- Director Accreditation Program (DAP) 107/2014

Shareholding (%) : 0.155

Family Relationship among Company's Directors : None

Period	Positon	Company
Past Experiences		
2013 - Present	Chairman	Kaset Thai International Sugar Corporation Pcl.
2008 - Present	Chairman	T S Flour Mill Pcl.
2008 - Present	Chairman and Independent Director	Thai Sugar Terminal Pcl.
2004 - Present	Independent Director and Chairman of the Audit Committee	Thai Rung Union Car Pcl.
1999 - Present	Director, Member of The Audit Committee, Member of the Governance and Nomination Committee	Siam Cement Pcl.
Current Positions in other non-listed companies		
2019 - Present	Chairman	GGC KTIS Bio Industrial Co., Ltd
2013 - Present	Chairman	Ruampol Bio Power Co., Ltd.
2013 - Present	Director	Thaiekaluck Power Co., Ltd
2012 - Present	Chairman	Siri Charoen Sapraiwan Co., Ltd
2011 - Present	Chairman	Kaset Thai Bio Power Co., Ltd.
2010 - Present	Chairman	S.I. Property Co., Ltd.
2008 - Present	Chairman	TSG Asset Co., Ltd.
2008 - Present	Chairman	T S Oil Industry Co., Ltd.
2004 - Present	Chairman	KTIS Bioethanol Co., Ltd.
2000 - Present	Chairman	Pan-Paper (1992) Co., Ltd.
1993 - Present	Director	H.C. Starck Co., Ltd.

Period	Positon	Company
Past Experiences		
2011 - 2013	Director	PTT Exploration and Production Public Company Limited
2008 - 2013	Chairman	Thai Sugar Industry Co., Ltd.
2000 - 2014	Chairman	Ruamkij Angthong Warehouse Co., Ltd.
1999 - 2000	Chairman	National Petrochemical Public Company Limited
1997 - 1998	Chairman	Electricity Generating Authority of Thailand
1997 - 1999	Chairman	Petroleum Authority of Thailand
1996 - 1999	Permanent Secretary	Ministry of Industry

2

Name : Mr.Sirivuthi Siamphakdee **Age** : 76 Year

Position : Director
Chairman of Executive Committee Chief Financial Officer
Risk Management Committee
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Commerce, Banking and Finance, Thammasat University
- Director Accreditation Program (DAP 54/2006)

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Director	Kaset Thai International Sugar Corporation Pcl.
	Chairman of Executive Committee	
	Chief Financial Officer	
	Risk Management Committee	
Current Positions in other non-listed companies		
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2014 - Present	Chairman	KTIS Bioenergy Co., Ltd
2014 - Present	Chairman	KTIS Biogass Power Co., Ltd
2013 - Present	Director	Ruampol Biopower Co., Ltd
2013 - Present	Director	Thaiekaluck Power Co., Ltd
2011 - Present	Chairman	KTIS Bio Fertilizer Co., Ltd.
2010 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2007 - Present	Director	Thai Sugar Miller Co., Ltd.
2007 - Present	Director	KTIS Bioethanol Co., Ltd.
1995 - Present	Director	Ruampol Industries Nakornsawan Co., Ltd.

Period	Positon	Company
1983 - Present	Director	Thai Identity Sugar Co., Ltd.
Present	President of Association	Thai Ethanol Manufacturing Association (TEMA)
Present	Chairman	Thew River Place Condominium Juristic Person
Present	Chairman	Liberty Plaza Condominium Juristic Person
Present	Director	The Grand UB Co., Ltd.
Past Experiences		
2016 - 2017	Acting Manager	Thew River Place Condominium Juristic Person
2014 - 2016	Advisor and Director	Liberty Plaza Condominium Juristic Person
2010 - 2014	Chairman	Liberty Plaza Condominium Juristic Person
2010 - 2013	Director and Chairman Executive Committee	Kaset Thai Sugar Industry Co., Ltd.
2007 - 2012	Managing Director	KTIS Bioethanol Co., Ltd.

3

Name : Mr.Parphan Siriviriyakul **Age** : 67 Year

Position : Director
Chief Executive Officer
Risk Management Committee
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Honorary Bachelor of Arts, Nakhon Sawan Rajabhat University
- Director Accreditation Program (DAP 96/2012)

Shareholding (%) : 0.000

Family Relationship among Company's Directors : Father to Mr. Sirapak Siriviriyakul
Elder brother to Mrs.Darat Vibhatakalasa
Elder brother to Mr.Prasert Siriviriyakul
Elder brother to Mr.Nathapun Siriviriyakul

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Director	Kaset Thai International Sugar Corporation Pcl.
	Chief Executive Officer	
	Risk Management Committee	
Current Positions in other non-listed companies		
2019 - Present	Director	GGC KTIS Bio Industrial Co., Ltd
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2015 - Present	Director	Hatai Jaroon Ek Holding Co., Ltd.
Present	Chairman of the Advisory	Chaopraya University
2014 - Present	Advisor	The Federation of Thai Industries Northern Chapter
2014 - Present	Director	KTIS Bioenergy Co., Ltd

Period	Positon	Company
2014 - Present	Director	KTIS Biogass Power Co., Ltd
2013 - Present	Chairman	Sapsirikaset Co., Ltd
2013 - Present	Chairman	Environment Pulp and Packaging Co., Ltd
2013 - Present	Chairman	Lopburi Bioethanol Co., Ltd
2013 - Present	Chairman	Lopburi Biopower Co., Ltd
2013 - Present	Director	Ruampol Biopower Co., Ltd
2013 - Present	Director	3S Holding CO., Ltd.
2011 - Present	Director	KTIS Bio Fertilizer Co., Ltd.
2010 - Present	Director	Jaroon Hatai Ek Holding Co., Ltd
2010 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2009 - Present	Chairman	Thaiekaluck Power Co., Ltd
2004 - Present	Founder President	The Federation of Thai Industries Nakhonsawan Chapter
2003 - Present	Chairman	Permsinpattana Co., Ltd.
2002 - Present	Director	Environment Pulp and Paper Co., Ltd.
1998 - Present	Director	KTIS Bioethanol Co., Ltd.
1992 - Present	Director	T.Y.T. Trading Co., Ltd.
1989 - Present	Director	Thai Wisanu Nakornsawan Co., Ltd.
1973 - Present	Chairman	Thai Identity Sugar Co.,Ltd
1963 - Present	Director	Ruampol Industries Nakornsawan Co., Ltd.
Past Experiences		
2009 - 2012	Director	S.I. Property Co., Ltd.
2009 - 2015	Director	New Thai Identity Co., Ltd.
2009 - 2015	Director	New Ruampol Co., Ltd.
2008 - 2013	Chief Executive	Kaset Thai Sugar Industry Co., Ltd.
2008 - 2015	Director	Ekvisanu Co., Ltd.
2003 - 2012	Chairman	Siam PP International Co., Ltd.
1998 - 2015	Director	T.I. Business Co., Ltd.
1995 - 2015	Director	Nakhonsawan Agriculture Co., Ltd.
1982 - 2012	Director	Ruam Toon Warehouse Nakornsawan Co., Ltd.
2012	Director	Aekphol Sugar Co., Ltd.
2012	Director	Ruamkij Angthong Warehouse Co., Ltd
2012	Director	TISS Co., Ltd.

4

Name : Mr.Nathapun Siriviriyakul **Age** : 55 Year

Position : Director
Deputy to Chief Executive Officer
Risk Management Committee
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Engineering (Computer Engineering) (Second Class Honours), Chulalongkorn University
- Master of Business Administration, Washington State University, USA
- Advanced Security Management Program 2/2011
- Top Executive Program in Commerce and Trade 3/2010
- Top Executive Program in College of Commerce and Capital Markets 16/2013
- Director Accreditation Program (DAP96/2012)

Shareholding (%) : 0.705

Family Relationship among Company's Directors : Younger brother to Mr.Parphan Siriviriyakul
Younger brother to Mr.Prasert Siriviriyakul
Younger brother to Mrs.Darat Vibhatakalasa

Period	Positon	Company
Current Positions in other listed companies		
2016 - Present	Deputy to Chief Executive Officer	Kaset Thai International Sugar Corporation Pcl.
2013 - Present	Director and Risk Management Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2019 - Present	Director	GGC KTIS Bio Industrial Co., Ltd
2015 - Present	Director	Hatai Jaroon Ek Holding Co., Ltd.
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2014 - Present	Director	KTIS Bioenergy Co., Ltd
2014 - Present	Director	KTIS Biogas Power Co., Ltd
2013 - Present	Director	Thaikaluck Power Co.,Ltd
2013 - Present	Director	Ruampol Bio Power Co., Ltd.
2013 - Present	Director	Sapsirikaset Co.,Ltd
2013 - Present	Director	Environment Pulp and Packaging Co., Ltd
2013 - Present	Director	Lopburi Bioethanol Co., Ltd.
2013 - Present	Director	Lopburi Biopower Co., Ltd.
2013 - Present	Director	3S Holding Co., Ltd.
2011 - Present	Director	KTIS Bio Fertilizer Co., Ltd.
2010 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2010 - Present	Director	Jaroon Hatai Ek Holding Co., Ltd
2009 - Present	Director	S.I. Property Co., Ltd.
2008 - Present	Independent Director	King Wan Corporation Limited (Singapore)
2003 - Present	Director	Permsinattana Co., Ltd.

Period	Positon	Company
2003 - Present	Director	Environment Pulp and Paper Co., Ltd.
2002 - Present	Director	Siam P.P. International Co., Ltd.
2001 - Present	Director	Thai Sugar Miller Co., Ltd.
1998 - Present	Director	KTIS Bioethanol Co., Ltd.
1997 - Present	Director	T.Y.T. Trading Co., Ltd.
1995 - Present	Director	Ruampol Enterprise Co., Ltd
1994 - Present	Director	Ruamkij Anghthong Warehouse Co., Ltd.
1989 - Present	Director	TISS Co., Ltd.
1989 - Present	Director	Thai Wisanu Nakornsawan Co., Ltd.
1983 - Present	Director	Thai Identity Sugar Co., Ltd.
1983 - Present	Director	Aekphol Sugar Co., Ltd.
Present	Director	NSC (Thailand) Co., Ltd.
Past Experiences		
2015	Director	Nakhonsawan Agriculture Co., Ltd.
2013 - 2016	Chief Executive Officer - Bio Energy & Product	Kaset Thai International Sugar Corporation Pcl.
2012 - 2013	Director and Chief Executive Officer - Bio Energy & Product	Kaset Thai Sugar Industry Co., Ltd.
2009 - 2015	Director	New Thai Identity Co., Ltd
2009 - 2015	Director	New Ruampol Co., Ltd.

5

Name : Ms.Darat Vibhatakalasa **Age :** 66 Year

Position : Director
Deputy to Chief Executive Officer
Nomination and Remuneration Committee
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Education, Chulalongkorn University (First Class Honours)
- Master of Education, Chulalongkorn University
- Doctor of Philosophy, Chaopraya University
- Certificate, National Defense, class 2006 (NDP 19), National Defense College
- Director Accreditation Program (DAP 96/2012)

Shareholding (%) : 0.320

Family Relationship among Company's Directors : Younger Sister to Mr.Parphan Siriviriyakul
Elder Sister to Mr.Prasert Siriviriyakul
Elder Sister to Mr.Nathapan Siriviriyakul

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Director	Kaset Thai International Sugar Corporation Pcl.
	Deputy to Chief Executive Officer	
	Nomination and Remuneration Committee	
Current Positions in other non-listed companies		
Private Sector		
2017 - Present	Director	Samui Pearl Resort Co., Ltd
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2015 - Present	Director	Hatai Jaroon Ek Holding Co., Ltd.
2013 - Present	Director	Ruampol Bio Power Co., Ltd.
2013 - Present	Director	Thaiekaluck Power Co., Ltd.
2013 - Present	Director	3S Holding Co., Ltd.
2010 - Present	Director	Jaroon Hatai Ek Holding Co., Ltd.
2010 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2007 - Present	Director	T.Y.T. Trading Co., Ltd.
2003 - Present	Director	Permsinpattana Co., Ltd.
2002 - Present	Executive Committee	Thai Wisanu Nakornsawan Co., Ltd.
1996 - Present	Owner	Publisher and Advertiser of Sawan News
1996 - Present	Director	Siriviriyakul Co., Ltd
1995 - Present	Deputy Managing Director	Ruampol Enterprise Co., Ltd.
1983 - Present	Executive Committee	Thai Identity Sugar Co., Ltd.
1983 - Present	Director	Aekphol Sugar Co., Ltd.
Education Sector		
2017 - Present	Vice President	Chaopraya University
2016 - Present	Qualified Member	Education committee, Nakhon Sawan
1990 - Present	Chairman of the Executive Committee	Viriyalai Nakhonsawan Vocational College
Academic Sector		
2018 - Present	Vice Chairman	Human Empowerment Institute (F.T.I.)
Economic Sector		
2018 - Present	Executive Director	Federation of Thai Industries (F.T.I.)
2013 - Present	Senior President	The Federation of Nakhonsawan Industries
2010 - Present	Honorary President	Northern Region of F.T.I Provincial Chapters
2002 - Present	Director	Joint Public-Private Committee for Economic Affairs,Nakhonsawan
Administrative Sector		
2015 - Present	Chairman	Private Cooperation Center, Nakhonsawan
2014 - Present	Subcommittee	Facilitation of the Decentralization to the Local Government Organization Committee, Nakhonsawan
2009 - Present	Director	Integrated Provincial Administration Committee of Nakhonsawan

Period	Positon	Company
Social Sector		
2008 - Present	Advisor	Chulalongkorn University Alumni Association of Nakhonsawan Chapter
Past Experiences		
2016 - 2017	Director	Promoting University committee, Naresuan University
2011 - 2019	Subcommittee	The Justice fund subcommittee of Nakhonsawan province
2013 - 2015	Executive Committee	Association of Private Higher Education Institutions of Thailand Under the Patronage of Her Royal Highness Princess Maha Chakri Sirindhorm (APHEIT)
2012 - 2014	Vice Chairman	Federation of Thai Industries (F.T.I.)
2011 - 2015	Vice Chairman	Private Cooperation Center, Nakhonsawan
2010 - 2012	Advisor	Inspector General, Office of the Prime Minister, Academic Sector
2010 - 2012	Director	Forty-two Educational Service Office Area
2010 - 2012	Deputy to Secretary	Federation of Thai Industries (F.T.I.)
2010 - 2014	President	Nakhonsawan Girls' School Alumni Association
2009 - 2016	Director	Board Governance Committee, Nakhonsawan
2007 - 2011	Advisor	Inspector General of Prime Minister office on Economy
2007 - 2008	Member	National People's Assembly of Thailand
2006 - 2012	Director	Vocational Education Area 1.
2006 - 2010	Chairman	Northern Region of F.T.I Provincial Chapters
2005 - 2007	President	Chulalongkorn University Alumni Association of Nakhonsawan Chapter
2003 - 2016	Director	Integrated Regional Administration Committee of Lower Northern Region 2
2000 - 2017	Director	Federation of Thai Industries (F.T.I.)
1998 - 2016	Vice President for Management	Chaopraya University
1992 - 2006	Director	Cane and Sugar Board
1991 - 1993	President	Provincial Red-cross of Phrae
1989 - 1991	President	Provincial Red-cross of Maha Sarakham

6

Name : Mr.Prasert Siriviriyakul **Age** : 61 Year

Position : Director
Deputy to Chief Executive Officer
Risk Management Committee
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Doctor of Dental Surgery, Chulalongkorn University
- Mini MBA, Thammasat University
- Director Accreditation Program (DAP 96/2012)

Shareholding (%) : 0.152

Family Relationship among Company's Directors : Younger Brother to Mr.Parphan Siriviriyakul
Younger Brother to Mrs.Darat Vibhatakalasa
Elder Brother to Mr.Nathapun Siriviriyakul

Period	Positon	Company
Current Positions in other listed companies		
2016 - Present	Deputy to Chief Executive Officer	Kaset Thai International Sugar Corporation Pcl.
2013 - Present	Director and Risk Management Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2015 - Present	Director	Hatai Jaroon Ek Holding Co., Ltd.
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2014 - Present	Director	KTIS Bioenergy Co., Ltd
2014 - Present	Director	KTIS Biogass Power Co., Ltd
2013 - Present	Director	3S Holding CO., Ltd.
2013 - Present	Director	Thaiekaluck Power Co., Ltd.
2013 - Present	Director	Ruampol Bio Power Co., Ltd.
2013 - Present	Director	Sapsirikaset Co., Ltd
2013 - Present	Director	Environment Pulp and Packaging Co., Ltd
2013 - Present	Director	Lopburi Bioethanol Co., Ltd.
2013 - Present	Director	Lopburi Biopower Co., Ltd.
2011 - Present	Director	KTIS Bio Fertiliser Co., Ltd.
2010 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2010 - Present	Director	Jaroon Hatai Ek Holding Co., Ltd.
2003 - Present	Director	Environment Pulp and Paper Co., Ltd.
2003 - Present	Director	Permsinpattana Co., Ltd.
1998 - Present	Director	KTIS Bioethanol Co., Ltd.
1995 - Present	Director	Ruampol Enterprise Co., Ltd
1992 - Present	Director	Thai Wisanu Nakornsawan Co., Ltd.

Period	Positon	Company
1990 - Present	Director	Ruam Toon Trading Nakornsawan Co., Ltd.
1989 - Present	Director	TISS Co., Ltd.
1984 - Present	Director	Nakhonsawan Ruamtoon Patthana Co., Ltd
1983 - Present	Director	Thai Identity Sugar Co., Ltd.
1982 - Present	Director	Ruam Toon Warehouse Nakornsawan Co., Ltd.
Past Experiences		
2013 - 2016	Chief Executive Officer-Cane and Sugar	Kaset Thai International Sugar Corporation Pcl.
2012 - 2013	Director and Chief Executive Officer-Cane and Sugar	Kaset Thai Sugar Industry Co., Ltd.
2010 - 2012	Director and Deputy Managing Director	Kaset Thai Sugar Industry Co., Ltd.

7 **Name** : Mr.Krairit Nilkuha **Age** : 68 Year
Position : Independent Director
Chairman of Audit Committee

Period of Directorship : 5 year 7 months (Appointed on 26 February 2014)

Education/Training with IOD :

- Master of M.Sc. (Petroleum Engineering), New Mexico Institute of Mining and Technology, USA
- B-B.Sc. in Mechanics Engineering, Kasetsart University
- Diploma, the National Defense Course, Class 48 (2005), National Defence College
- Senior Executive Program, Batch#8, Capital Market Academy
- Director Accreditation Program (DAP 53/2006)
- Audit Committee Program (ACP 24/2008)
- Understanding the Fundamental of Financial Statements (UFS 6/2006)

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2014 - Present	Independent Director and Chairman of Audit Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2000 - Present	Chairman	Technical Petroleum Training Institute Foundation
Past Experiences		
2013 - 2014	Director	Thai Credit Guarantee Corporation (TCG)
2010 - 2015	Director	Bangchak Petroleum Pcl.
2010 - 2013	Director	PTT Public Company Limited
2009 - 2012	Director-General	Department of Alternative Energy Development and Efficiency
2008 - 2009	Deputy Permanent Secretary	Ministry of Energy

Name : Mr.Sathaporn Kotheeranurak **Age** : 63 Year

Position : Independent Director
Audit Committee

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Master of Business Administration Chulalongkorn University
- Diploma in Auditing Thammasat University
- Bachelor in Accounting Rajamangala University of Technology Thanyaburi
- Certified Public Accountant Certificate No.3349
- Certified Professional Internal Auditor (CPIA)
- Degree in WorPorOr2005,National Defense College
- Royal Thai Army War College
- Program 44 Institute of Advanced Military Studies
- Diploma in higher PorSorSor 1, PorRorMor 1 and PorPorPor 1 King Prajadhipok's Institute
- Diploma in SorJorVor 81 Applied Psychology Institute
- Diploma BorRorOr 1 Royal Thai Police
- Diploma In higher BorMorChor 3 National Intelligence Agency
- Certificate of Public Law Class 6 Faculty of Law, Thammasat University and Office of the Council of State
- Study Meet on Strategic Merger and Acquisition for SMEs C43 Year 2010, Korea
- Study Mission to Nonmember Countries on Knowledge Creating Enterprises Year 2009, Germany
- China-ASEAN Young entrepreneurs Forum Year 2008, China
- Asean-China Young Entrepreneurs Workshop Year 2008, Brunei
- Top Management Forum : Corporate Governance Year 2003, Japan
- The Training Program on Industrial Property Rights (Fundamental Course for IP Practitioners (EIPF)) Year 2002, Japan
- Financing and Management Development in Market Oriented Economies Year 1998, Australia
- International Forum on SMEs : Acceleration Growth and Enhancing Competitiveness the Knowledge Economy Year 2001, India
- Director Accreditation Program (DAP 35/2009)
- Audit Committee Program (ACP 13/2013)
- Board Matters and Trends (BMT 6/2018)

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2015 - Present	Chairman of Audit Committee and Independent Director	A A Electri Li Public Company Limited
2013 - Present	Independent Director and Audit Committee	Kaset Thai International Sugar Corporation Pcl.
2009 - Present	Independent Director and Chairman of Audit Committee	Surapon Foods Pcl.
Current Positions in other non-listed companies		
1995 - Present	Managing Director	Sahaporn & CO Co., Ltd.
1993 - Present	Managing Director	Sungora Co., Ltd.
1993 - Present	Managing Director	DBMT Co., Ltd.
1991 - Present	Managing Director	S.V. Evergreen Co., Ltd.

Period	Positon	Company
Past Experiences		
2014 - 2019	Associate Judge	The Central Intellectual Property and International Trade Court
2012 - 2019	Member of Sub-committee : Selection the Candidates of NACC Integrity Awards Consideration	Office of the National Anti - Corruption
2012 - 2015	Independent Director and Audit Committee	Kaset Thai Sugar Industry Co., Ltd.
2012 - 2013	Chairman of Audit Committee	Gunkul Engineering Pcl.
	Independent Director	
	Risk Management Committee	
2011 - 2014	Member of Social Anti-Corruption Committee	Office of the National Anti-Corruption
2011 - 2014	Chairman of Team of Selection the Candidates of NACC Integrity Awards Consideration	Office of the National Anti-Corruption
2010 - 2019	Member of Sub-committee : Promotion and Incubation of Enterprises and Intellectual Property Management in Higher Education Institutions (UBI) Special Qualified	Office of the Higher Education Commission : OHEC
2009 - 2013	Directors and Faculty of Business Administration	Rajamangala University of Technology Thanyaburi
2009 - 2011	Independent Director and Chairman of Audit Committee	Interlink Communication Pcl.
2008 - 2012	Independent Director and Audit Committee	Gunkul Engineering Pcl.
2006 - 2009	Independent Director and Chairman of Audit Committee	Asia Fiber Pcl.
2005 - 2015	Independent Director and Audit Committee	Star Sanitary Ware Pcl.
2005 - 2006	Chairman of Audit Committee	Thailand Management Association
2005 - 2011	Associated Judge	The Central Intellectual Property and International Trade Court
2005 - 2011	Board Treasurer	The Thailand Chamber of Commerce and Board of trade of Thailand
2005 - 2011	Chairman of Accountance and financial	The Thailand Chamber of Commerce and Board of trade of Thailand
2002 - 2006	Advisor of Audit Committee	The Federation of Thai Industries
2000 - 2002	Vice President, Tax Business Land and Investment Committee	The Federation of Thai Industries

9

Name : Acting Sub Lt.T-rayooth Changpetch **Age** : 77 Year

Position : Independent Director
Chairman of Risk Management Committee
Audit Committee

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Laws, Thammasat University
- Director Accreditation Program (DAP 97/2012)
- Audit Committee Program (ACP 41/2012)
- Monitoring Fraud Risk Management (MFM 8/2012)

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Independent Director Chairman of Risk Management Committee Audit Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
None		
Past Experiences		
2012 - 2013	Independent Director and Audit Committee	Kaset Thai Sugar Industry Co., Ltd.

10

Name : Mr.Issakan Krivitthaya **Age :** 76 Year

Position : Independent Director
Chairman of Nomination and Remuneration Committee
Risk Management Committee

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Accounting, Thammasat University
- Master of Economics, North Dagota State University U.S.A
- Certificate, American Institute of Banking (New York) U.S.A.
- Director Accreditation Program (DAP 97/2012)
- Audit Committee Program (ACP 41/2012)
- Monitoring Fraud Risk Management (MFM 8/2012)

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Independent Director Chairman of Nomination and Remuneration Committee Risk Management Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
None		
Past Experiences		
2012 - 2013	Independent Director	Kaset Thai Sugar Industry Co., Ltd.

11

Name : Mr.Phoonsak Boonsalee **Age** : 71 Year**Position** : Independent Director
Nomination and Remuneration Committee**Period of Directorship** : 6 year 8 Month (Appointed on 29 January 2013)**Education/Training with IOD :**

- Doctor of Arts (Business Administration), Chaopraya University
- M.A. (PHILOSOPHY), Kasetsart University
- MBA.(Management) Eastern Asia University
- D.B.A (Honorary degree) Human Resource Management, Uttaradit Rajabhat University
- Director Accreditation Program (DAP 97/2012)

Shareholding (%) : None**Family Relationship among Company's Directors** : None

Period	Positon	Company
Current Positions in other listed companies		
2016 - Present	Director and Chairman of Executive Committee	Saksiam Leasing Pcl.
2013 - Present	Independent Director And Nomination and Remuneration Committee	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
None		
Past Experiences		
2012 - 2013	Independent Director	Kaset Thai Sugar Industry Co., Ltd.
1995 - 2016	Director and Chief Executive Officer	Saksiam Commercial Leasing Co., Ltd

12

Name : Mr.Kunihiko Tahara **Age** : 43 Year**Position** : Director
Assistant to Chief Executive Officer
Assistant to Chief Financial Officer**Period of Directorship** : 2 year 4 months (Appointed on 12 May 2017)**Education/Training with IOD :**

- Bachelor of Economics, Hitotsubashi University
- Director Accreditation Program (DAP 135/2017)

Shareholding (%) : None**Family Relationship among Company's Directors** : None

Period	Positon	Company
Current Positions in other listed companies		
2017 - Present	Director Assistant to Chief Executive Officer Assistant to Chief Financial Officer	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2016 - Present	Assistant to General Manager, Grain Oils & Sweeteners Dept.	Sumitomo Corporation Ltd.
Past Experiences		
2011 - 2016	Assistant to General Manager, Sweeteners & Beverages Dept.	Sumitomo Corporation Ltd.
2010 - 2011	Assistant to General Manager, Grain & Sweeteners Dept.	Sumitomo Corporation Ltd.
2009 - 2010	Senior Staff of Grain & Sweeteners Dept. (London)	Sumitomo Corporation Ltd.
2005 - 2009	Sales Manager	Sumitomo Corporation Ltd.
2004	Staff Member of Sweeteners & Beverages Dept.	Sumitomo Corporation Europe Ltd. (London)
2002 - 2004	Staff Member of Coffee & Alcoholic Beverages Dept.	Sumitomo Corporation Ltd.
2000 - 2002	Staff Member of Food Dept.,No.2 (Tokyo)	Sumitomo Corporation Ltd.

13

Name : Mr.Apichart Noochprayoon **Age** : 47 Year

Position : Director
Chief Executive Officer-Bio
Assistant to Chief Executive Officer
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Economics (International Economics), Chulalongkorn University
- Executive MBA, Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Director Accreditation Program (DAP 96/2012)

Shareholding (%) : 0.000

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2016 - Present	Chief Executive Officer-Bio	Kaset Thai International Sugar Corporation Pcl.
2015 - Present	Assistant to Chief Executive Officer	Kaset Thai International Sugar Corporation Pcl.
2013 - Present	Director	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2019 - Present	Advisor	GGC KTIS Bio Industrial Co., Ltd
2015 - Present	Managing Director and Chief Executive Officer-Bio	KTIS Research and Development Co., Ltd.
2013 - Present	Director	Thaiekaluck Power Co., Ltd.

Period	Positon	Company
2013 - Present	Director	Ruampol Bio Power Co., Ltd.
2011 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2002 - Present	Director	Ruamkij Angthong Warehouse Co., Ltd.
2002 - Present	Director	Sunshine Export Co., Ltd.
2001 - Present	Director	TISS Co., Ltd.
2001 - Present	Director	T.Y.T. Trading Co., Ltd.
2000 - Present	Executive Committee	Aekphol Sugar Co., Ltd.
Past Experiences		
2015	Director	Siri Charoen Export Co., Ltd
2013 - 2014	Senior director - engineering	Kaset Thai International Sugar Corporation Pcl.
2012 - 2013	Senior director - engineering	Kaset Thai Sugar Industry Co., Ltd.
2005 - 2012	Director and Executive Committee	Kaset Thai Sugar Industry Co., Ltd.
2005 - 2015	Deputy Managing Director	Thai Identity Sugar Co., Ltd.
2005 - 2015	Deputy Managing Director	Ruampol Enterprise Co., Ltd
2005 - 2015	Deputy Managing Director	Environment Pulp and Paper Co., Ltd.
2005 - 2012	Deputy Managing Director	Kaset Thai Sugar Industry Co., Ltd.

14

Name : Miss Chua Eng Eng

Age : 49 Year

Position : Director
Authorized Director

Period of Directorship : 6 year 8 Month (Appointed on 29 January 2013)

Education/Training with IOD :

- Bachelor of Arts in Economics, National University of Singapore

Shareholding (%) : 0.558

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2013 - Present	Director	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2013 - Present	Director	Grand Helio Pte.Ltd.
2013 - Present	Director	Soon Zhou Investments Pte. Ltd.
2012 - Present	Director	Siri Charoen Sapraivan Co., Ltd
2012 - Present	Director	Gold Topaz Pte. Ltd.
2012 - Present	Director	Gold Hyacinth Development Pte. Ltd.
2012 - Present	Director	Bukit Timah Green Development Pte. Ltd.
2011 - Present	Director	Nanyang International Education (Holdings) Ltd.
2011 - Present	Director	Chang Li Investments Pte. Ltd.

Period	Positon	Company
2011 - Present	Director	Li Ta Investments Pte. Ltd.
2011 - Present	Director	Soon Li Investments Pte. Ltd.
2010 - Present	Director	S.I. Property Co., Ltd.
2004 - Present	Director	King Wan Industries Pte. Ltd.
2002 - Present	Director	Xylem Investments Pte. Ltd.
2001 - Present	Director	King Wan Development Pte. Ltd.
1996 - Present	Director	King Wan Construction Pte. Ltd.
1994 - Present	Managing Director	K&W Mobile Loo Services Pte. Ltd.
Past Experiences		
2004 - 2014	Director	KTIS Bioethanol Co., Ltd.
2003 - 2014	Director	Environment Pulp and Paper Co., Ltd.

15

Name : Mr. Sirapak Siriviriyakul **Age** : 36 Year

Position : Director
Authorized Director
Assistant Director – CEO Office

Period of Directorship : 4 year 4 months (Appointed on 14 May 2015)

Education/Training with IOD :

- Bachelor of Education (Business Education), Chulalongkorn University
- Master of Business Administration, Chulalongkorn University

Shareholding (%) : 4.940

Family Relationship among Company's Directors : Son to Mr. Parphan Siriviriyakul
Nephew to Mrs.Darat Vibhatakalasa
Nephew to Mr.Prasert Siriviriyakul
Nephew to Mr.Nathapun Siriviriyakul

Period	Positon	Company
Current Positions in other listed companies		
2015 - Present	Director and Assistant Director - CEO Office	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
2019 - Present	Director	GGC KTIS Bio Industrial Co., Ltd
2018 - Present	Director	Kaset Thai Sugar Industry Co., Ltd.
2018 - Present	Director	Environment Pulp and Packaging Co., Ltd
2018 - Present	Director	HuaHinPearl Co., Ltd.
2017 - Present	Director	Thaiekaluck Power Co., Ltd.
2017 - Present	Director	Ruampol Bio Power Co., Ltd.
2016 - Present	Director	Siri Charoen Export Co., Ltd
2016 - Present	Director	Thai Identity Sugar Co.,Ltd

Period	Positon	Company
2016 - Present	Director	Environment Pulp and Paper Co.,Ltd
2016 - Present	Director	KTIS Bioethanol Co.,Ltd
2016 - Present	Director	Kaset Thai Bio Power Co., Ltd.
2016 - Present	Director	KTIS Bio Fertilizer Co.,Ltd
2016 - Present	Director	Sunshine Export Co.,Ltd
2016 - Present	Director	T.Y.T Trading Co.,Ltd
2016 - Present	Director	T.I.S.S Co.,Ltd
2016 - Present	Director	Poompattana Business Co.,Ltd
2016 - Present	Director	Suebsiri Sawat Co.,Ltd
2016 - Present	Director	Agro Ethanol Co.,Ltd
2016 - Present	Director	E.P.C Power Co.,Ltd
2016 - Present	Director	Ruampol Enterprise Co.,Ltd
2016 - Present	Director	Synphaet Nakhonsawan Co.,Ltd
2015 - Present	Director	KTIS Research and Development Co., Ltd.
2015 - Present	Director	Aekphol Sugar Co., Ltd.
2015 - Present	Director	Phuket Pearl Resort Co., Ltd
2015 - Present	Director	S.I. Property Co., Ltd.
2012 - Present	Director	Siri Charoen Sapraiwat Co., Ltd
2010 - Present	Director	S.I. SiriCharoen Co., Ltd.
2008 - Present	Director	Ruamkij Angthong Warehouse Co., Ltd.
Past Experiences		
2015 - 2017	Director	Phoomlert Business Co., Ltd

16

Name : Mrs.Nomchit Acaramekin **Age** : 60 Year

Position : Director - Accounting Department

Education/Training with IOD :

- Bachelor of Accounting, Bangkok University

Shareholding (%) : None

Family Relationship among Company's Directors : None

Period	Positon	Company
Current Positions in other listed companies		
2012 - Present	Director - Accounting Department	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
None		
Past Experiences		
2008 - 2012	Assistant to General Manager	Kaset Thai Sugar Industry Co., Ltd.

17

Name : Mr.Poomrerk Wangpreedalertkul **Age** : 28 Year**Position** : Company Secretary**Period of appointment** : 25 March 2019**Education/Training with IOD :**

- Master of Laws , University of Pennsylvania
- Bachelor of Laws , Chulalongkorn University
- Thai Barrister at Law
- Company Secretary Program (CSP 96/2019)
- Director Accreditation Program (DAP SEC-2013)

Shareholding (%) : 2.97

Family Relationship among Company's Directors : Nephew to Mr.Parphan Siriviriyakul
 Nephew to Mrs.Darat Vibhatakalasa
 Nephew to Mr.Prasert Siriviriyakul
 Nephew to Mr.Nathapun Siriviriyakul

Period	Positon	Company
Current Positions in other listed companies		
2019 - Present	Company Secretary	Kaset Thai International Sugar Corporation Pcl.
2012 - Present	Head of Legal Department	Kaset Thai International Sugar Corporation Pcl.
Current Positions in other non-listed companies		
None		
Past Experiences		
None		

Qualification of Company Secretary

1. Having basic knowledge of business, accounting, being proficient and understanding the Company's businesses;
2. Understanding roles and duties of Company Secretary;
3. Having knowledge of and understand laws, regulations of the Office of Securities and Exchange Commission and the Stock Exchange of Thailand, including good corporate governance;
4. Being independent and straight-forward in performing duties, not expecting for personal benefit from the Company's businesses, as well as committing to keep the Company's secret confidential;
5. Having experiences in the board's secretary or other qualification which would support the Company Secretary's work to be more efficient.

Scope of power and duties of the Company Secretary

1. The Company Secretary shall prepare and maintain the following documents:
 - register of Directors;
 - notices of Board meetings, minutes of Board meetings and annual reports; and
 - notices of shareholders' meetings and minutes of shareholders' meetings;
2. The Company Secretary shall maintain reports on conflicts of interest; and
3. The Company Secretary shall perform any other task as required under the notifications of the Capital Market Supervisory Board.

Details of Subsidiaries and Related Company's Directors

Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kaset Thai International Sugar Corporation Pcl.	X, V	I, II, V, IV	I, II, V, VI	I, II, V, IV	I, II, V, IV	I, II, V, IV	I, III, IV	I, III	I, VI, IV	I, VI	I, V	I, V	I, V	I, V	I, III	V
Subsidiaries																
Kaset Thai Bio Power Co., Ltd	X, V	I, V	I, V	I, V	I, V	I, V					I, V	I, V				
Thai Identity Sugar Co., Ltd		X, V	I, V	I, V	I, V	I, V					I, V					
Ekarat Pattana Co., Ltd	X, V	I, V		I, V	I, V	I, V					I, V					
Environment Pulp and Paper Co., Ltd		X, V			I, V	I, V					I, V					
Permsinpattana Co., Ltd		X, V	I, V		I, V	I, V										
Kaset Thai Bio Fertilizer Co., Ltd		X, V		I, V	I, V	I, V					I, V					
Thaieakluck Power Co., Ltd	I, V	X, V	I, V	I, V	I, V	I, V						I, V				
Sapsirikaset Co., Ltd		X, V			I, V	I, V										
Ruampol Bio Power Co., Ltd	X, V	I, V	I, V	I, V	I, V	I, V						I, V				
Lopburi International Sugar Co., Ltd		X, V			I, V	I, V										
Lopburi Bioethanol Co., Ltd		X, V			I, V	I, V										
Lopburi Biopower Co., Ltd		X, V			I, V	I, V										
KTIS Bio Energy Co., Ltd		I, V		X, V	I, V	I, V										
KTIS Biogas Power Co., Ltd		I, V		X, V	I, V	I, V										
KTIS Research and Development Co., Ltd.		X, V	I, V	I, V	I, V	I, V					I, V	I, V				
Related Company																
S.I. Property Co., Ltd.	X, V				I, V						I, V			I, V		
Aekphol Sugar Co., Ltd.			I, V		I, V						I, V	I, V				
Nakhonsawan Ruantoon Paththana Co., Ltd						I, V										

Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TISS Co., Ltd.					I, V	I, V					I, V	I, V				
Siam P.P. International Co., Ltd.					I, V											
Ruamkij Anghong Warehouse Co., Ltd.			I, V		I, V						I, V	I, V				
Ruam Toon Warehouse Nakornsawan Co., Ltd.						I, V										
Thai Wisanu Nakornsawan Co., Ltd.		I, V	I, V		I, V	I, V										
Ruam Toon Trading Nakornsawan Co., Ltd.						I, V										
Siri Charoen Export Co., Ltd											I, V					
Siri Charoen Sapraiwai Co., Ltd	X, V										I, V			I, V		
Ruampol Enterprise Co., Ltd.		I, V	I, V	I, V	I, V	I, V					I, V					
Poom Pattana Business Co., Ltd.						I, V					I, V					
Suerb Sirisawat Co., Ltd.						I, V					I, V					
Agro Ethanol Co., Ltd.											I, V					
EPC Power Co., Ltd.											I, V					

Remark (1)

- x = Chairman
 I = Director
 II = Executive Director
 III = Audit Committee
 IV = Risk Management Director
 V = Executive
 VI = Nomination and Remuneration Director
 VII = Controlling Person

Remark (2)

1. Mr.Pricha
 2. Mr.Parphan
 3. Ms.Darat
 4. Mr.Sirivuthi
 5. Mr.Nutthapun
 6. Mr.Prasert
 7. Mr.T-rayooth
 8. Mr.Sathaporn
 9. Mr.Issakan
 10. Mr. Phoosak Boonsalee
 11. Mr.Sirapak
 12. Mr.Apichart
 13. Mr.Kunihiko
 14. Ms. Chua
 15. Mr.Krairit
 16. Mrs.Nomchit
 Acaramekin

Business Overview

The Company and companies in KTIS group operate a fully-integrated sugar production and distribution business as No. 3 leader in Thailand. In addition to 3 sugar factories, of which 2 are owned by the Company and 1 is leased, the Company also have ethanol plant, bleached bagasse pulp plant, power plant and bio soil conditioner plant.

The Company's businesses can be divided into 2 fields:

1. Sugar Production and Distribution Business

The Company produces sugar and distributes its sugar products to domestic and international customers through KTIS, TIS and KTIS (Branch 3). Sugar products of the Company are refined sugar, white sugar and raw sugar.

2. Downstream Business

Byproducts such as molasses and bagasse from the Company's sugar production process lead to many downstream business opportunities as listed below:

(1) Bleached Bagasse Pulp and Pulp Mold Production and Distribution Business

The Company operates bleached bagasse pulp production and distribution business through EPPCO. The group's pulp factory is located near the Company's sugar plant and can produce pulp from bagasse which is a byproduct from the sugar production process. EPPCO has 3 types of bleached pulp products: dry pulp, wet pulp and packaging products from bagasse pulp (Pulp Mold).

(2) Ethanol Production and Distribution Business

The Company operates ethanol production and distribution business through KTBE and uses molasses derived from the group's sugar factories as a primary raw material. At present, KTBE manufactures and distributes 2 different grades of ethanol products: industrial alcohol and fuel alcohol.

(3) Electricity Generation and Sale Business

At present, the Company's sugar factories and bleached bagasse pulp factories are equipped with electricity and steam generating modules which use bagasse, a byproduct from production processes, as primary feedstock. The electricity and steam generated are used in the production processes of our 3 sugar factories and other factories. The surplus electricity is sold to the Electricity Generating Authority of Thailand (EGAT) and the Provincial Electricity Authorities (PEA) under the power purchase agreements (PPAs). KTBP, TEP and RPBP have also been established to operate the 60MW, 50MW and 50MW biomass power plant which are currently in commercial operation.

(4) Bio Soil Conditioner Production and Distribution Business

The Group produces bio soil conditioner production and distribution business through KTBF and uses recycling filter cake from sugar production process and vinasse from the biogas and ethanol production process to be raw materials in bio soil conditioner products. KTBF has 2 types of bio soil conditioner products: powder and pellet.

Business Goals

The Company is committed to continuous development to build a solid foundation for its sustainable growth and development and to become a leading organization in vertical integration from Agricultural products to Industrial products by expanding our internal and external business links. The Company aim to create a superior value chain for the Company's businesses which include sugar and sweetener production, biomass power generation, ethanol production, bagasse pulp production, and bio soil conditioner production. All of the Company's products and by-products are eco-friendly and safe for consumers.

Business Goals :

Leader of Cane Business

The Company initiated a wide range of activities with an aim of developing the upstream businesses. Such activities include the cane breeding selection, the application of cane plantation management technology, the technical training for cane farmers, the development of farming tools and machineries, the use of soil conditioner which is a by-product in order to strengthen in security of supplies used in the production process.

Leader of Sugar Business

The Company has consistently invested in the sugar production business. Thanks to its massive production capacity, the Company commercially benefits from the economies of scale driven by its production effectiveness, lower costs of energy, and added value of products. Raw sugar is processed into high quality refined sugar and liquid sucrose for the food industry. This is an example of how the Company adds value to its products and reflect the Company's leadership in the sugar industry.

Leader of Bio Energy Business

With the expansion of its biomass power plant business, the Company has a large-scale electricity production capacity and earned extra income from its power generation business. Bagasse, which is a by-product of the sugar production process and complement the integrated value chain of our industrial and agricultural businesses.

Leader of Bio Product Business

The Company has allocated investment to the development of bagasse pulp products into high-quality and food-grade packages to add value to the Company's business and the society at large.

Leadership of Ethanol Business

For value-added creation, the Company uses molasses to produce fuel-grade and industrial-grade ethanol; and enhances its ethanol production process to effectively generate and make use of bio gas which is a by-product from the ethanol production. As a result, the Company's production and business chains are fully integrated and eco-friendly at every step, and contributes to the Company's leadership in this business.

Leadership in Bio Soil Conditioner Business

By-products from the sugar and ethanol production processes are developed into valuable bio soil conditioner products which are good to enrich the soil quality, the farmers can save farming costs and increase the productivity effectively.

Journey to Sustainable Growth :

(1) Research and Development

The Company has invested in research and development initiatives, focusing on the cane breed improvement, and the development of energy crops, production technologies and machinery to sustain its growth momentum and leadership in the business complex through the diversification of products in consistent with the word "More Than Sugar". The company's portfolio includes the cane business, agricultural business, sugar and sweetener manufacturing business, biomass power business, and biomass product business.

(2) Development of Cane Farmers, Cane Farmer Network, and Raw Material Source

The Company has substantially invested in technical and R&D projects with a view to enhance the knowledge of cane farmers and the members of farmer network. In addition, the Company extended financial support to cane farmers to boost productivity in terms of the cane output per rai and the plantation area expansion. In addition to creating greater job opportunities for agricultural workers, the Company has also introduced and integrated advanced farming technologies to develop agriculture to new horizon. Farmers are encouraged to work as partners who help each other.

(3) Personnel Development

Human resources are one of its greatest assets for the Company and employees at all levels are continuously provided with learning opportunities which can help sharpen their functional skills and complement technique. Employees are encouraged to invent and be involved in innovation projects. As a part of its proactive human resources management process, the Company has worked with local and central educational institutes to offer opportunities to learn skills and knowledge relevant to the Company's business to students to build a pool of qualified candidates.

Journey to Professional Integrity and Corporate Governance :

Corporate Transparency

The Company has in place the Corporate Governance Handbook and has properly disclosed relevant information in accordance with applicable requirements in the spirit of transparency and integrity. As a result, every step of the Company's processes is verifiable. The Company respects all of its stakeholders which include shareholders, executives, investors, employees, farmers, clients, suppliers, contractors, communities, governmental agencies, etc. In addition, the Company's activities have been regularly audited by internal auditors and external auditors who are independent.

Contribution to Social, Educational and Environmental Development

The Company has put importance to activities which contribute to the development of the society, education, and environment, and has encouraged relevant parties to join such activities. The Company's corporate social responsibility programs such as "The Home, Temple, School and Factory Participation Program" which the participated local temples, communities and schools will be trained proper sugar cane farming knowledge. The society will be more wealthy from sugarcane and breeding species.

"The Green Village Program" will also bring benefits for the participated farmers and communities by joining hands in the fire prevention from burning cane during harvesting season. From the program the farmers will get better price by selling unburned cane. The factory will get better cane quality and also the reduction of pollution from smoke of fire on society etc.

Promotion of Health and Occupational Safety

The wellness, life quality, and safety of the employees and surrounding communities are one of the Company's main focuses which the Company has to strictly comply with the Health and Safety Law. Additional to the Law, the Company set up the teams to visit the community leaders, the religious leaders, including the nearby schools, and provide periodic medical check-up services to the residents of nearby communities. These activities has become the Company normal and continuous practice.

History and Milestones

Kaset Thai International Sugar Corporation Public Company Limited ("the Company"), formerly known as Kaset Thai Sugar Industry Company Limited, and companies in KTIS group are founded by Mr. Jaroon and Mrs. Hathai Siriviriyakul. With more than 53 years of professional experience in sugar business, KTIS group has extended into integrated sugar production business.

In 2013, the Company has converted into a public limited company and increased its registered capital from Baht 3,274,573,000 to Baht 3,888,000,000. In 2014, the Company has been listed on the Stock Exchange of Thailand which Baht 3,860,000,000 has been paid up and the security symbol "KTIS" on the Stock Exchange of Thailand. In 2015, the Company has increased its registered capital to Baht 3,888,000,010 and paid up capital Baht 3,860,000,010.

At the beginning, the group's sugar business was limited only to a sugar distribution in Nakhonsawan province. In 1967, Mr. Jaroon Siriviriyakul and a group of local distributors in Nakhonsawan province jointly acquired Mahakun Industry Company Limited, which has a sugar factory with the production capacity of 500 tons per day as a core asset, and renamed the company "Ruampol Enterprise Company Limited ("RPE)". With continuous improvement and development, the company's crushing capacity has increased from 500 tons of cane per day to 15,000 tons of cane per day.

In 1981, the Company acquired Thai Identity Sugar Factory Company Limited (TIS) and has continuously increased the production capacity of TIS's sugar plant to the level of 18,000 tons of cane per day.

In 1988, the Company further acquired Kaset Thai Sugar Company Limited which then had the production capacity of 6,000 tons of cane per day. To strengthen the financial structure and liquidity position of Kaset Thai Sugar Company Limited, our leadership has forged business partnership with UT Group Partnership Limited, a Singapore-based company, in 2008 to establish Kaset Thai Sugar Industry Company Limited which has incorporated sugar factory of Kaset Thai Sugar Company Limited in its umbrella and has further expanded its production capacity to stand today as the world's largest sugar factory with the capacity of 55,000 tons of cane per day.

In 2003, the Siriviriyakul family expanded into downstream business by establishing a joint venture with Permsinpattana Company Limited and 2 Singapore-based companies, i.e. King Wan Corporation Limited and Xylem Investment Partnership Limited. The JV was named Environmental Pulp and Paper Company Limited ("EPPCO") to produce bleached pulp from bagasse which is a by-product of the sugar production process. EPPCO can produce up to 100,000 tons of bleached pulp annually.

In 2004, the Siriviriyakul family founded a new company, namely Ekarat Pattana Company Limited ("EPC") under a joint venture with King Wan Industries Partnership Limited, Far East Distillers Partnership Limited and Sinotac Group Partnership Limited which are Singaporean entities to produce and sell ethanol from molasses. EPC has the production capacity of 230,000 liters per day. In 2017, changed its name to KTIS Bio Ethanol Co., Ltd. ("KTBE")

In 2010, the Siriviriyakul family commenced a new project that utilizes bagasse, a by-product from sugar production, for electricity generation. Kaset Thai Bio Power Company Limited ("KTBP") was established to run a 60MW biomass power plant which has commercially operated on 7 October 2013.

In 2011, the Siriviriyakul family furthered the advancement by recycling filter cake from sugar production process and vinasse from the biogas and ethanol production process into bio soil conditioner products. Kaset Thai Bio Fertilizer Company Limited ("KTBF") was established as a wholly-owned subsidiary of EPC in order to expand its integrated sugar business. KTBF has commercially operated and has the production capacity 15,000 tonnes of powder per year, 6,150 tons of pellets per year and 200,000 m3 of water per year. In 2017, changed its name to KTIS Bio Fertiliser Co., Ltd. ("KTBF")

To foster business growth through enhanced cane productivity and quality, in 2012 the Company furthered its cane farming and harvesting by purchasing 40 John Deere cane harvesters from T.K. Equipment Company Limited, an authorized dealer of John Deere in Thailand. As a condition under the cane harvester purchase agreement, John Deere will provide us training and consultation on the maintenance, repair, and development of our farming tools and equipment in order to increase the crop productivity of our farmers and in turn supply for our business operations.

In 2013, the Board and the shareholders' meeting approved the Company's acquisition of Thaiekaluck Power Company Limited ("TEP") to operate a 50MW biomass power plant with bagasse provided directly by TIS. In addition, the Company has established Ruampol Bio Power Company Limited ("RPBP") to operate a 50MW biomass power plant with bagasse provided directly by Ruampol factory.

The Board and the shareholders' meeting also approved the establishment of Sapsirikaset Company Limited ("SSK") to be in charge of the acquisition of lands to support KTIS group's business expansion. In 2013, SSK has purchased a total of 2,629-1-16 rais from parties not related to the Company.

In 2013, Sumitomo Corporation and Nissin Sugar Company Limited entered into the investment agreement to purchase the Company's ordinary shares worth up to Baht 2,650.0 million via 3S Holding Company Limited. As the companies are globally renowned trader and sugar manufacturer, the Company expects that the trilateral synergy will help strengthen the Company's competitiveness in the global market and business expansion in the Southeast Asia region.

In 2013, the Board approved the establishment of (1) Lopburi International Sugar Company Limited ("LIS"). In 2019, changed its name to Environment Pulp and Packaging Co., Ltd. (EPAC) (2) Lopburi Bioethanol Company Limited ("LBE") and (3) Lopburi Biopower Company Limited ("LBP") to support the business expansion.

In 2014, the Board approved the establishment of (1) KTIS Biogas Power Company Limited ("KBGP") to support the power business expansion, and (2) KTIS Bio Power Company Limited ("KBE") to support the ethanol and biomass power business.

In 2015, the Board of Directors approved the establishment of: (1) Kaset Thai Wiwat Co., Ltd. ("KTW") to support KTIS Group's asset management, and (2) KTIS Research and Development Co., Ltd. ("KTIS R&D") to support KTIS Group's businesses and its growth aspiration.

In 2019, the Board of Directors approved the (1) to KTIS Bio Ethanol Company Limited ("KTBE"), a subsidiary of the Company Has invested in a group of companies Global Green Chemical Public Company Limited in the project (Nakhonsawan Biocomplex: NBC) Environmental Chemistry Business Which is located in Takhli district Nakhon Sawan Province (2) Joint investment with Eurasia Light Industry Equipment Manufacturing Company Limited ("EAMC"), a machine manufacturer for container production from bagasse pulp and distributor of container from bagasse in China. Container plant from bagasse Which has a production capacity of 50 tons per day by having Enviroment Pulp and Packaging Company Limited ("EPAC"), a subsidiary of the Company Is a project company

Events and major activities in the year 2019

November 6, 2018

Lopburi International Sugar Company Limited ("LIS"), a subsidiary of the Group Changed its name to Enviroment Pulp and Packaging Co., Ltd. ("EPAC")

January 17, 2019

The Company has become the member of Bon Sucro and has been certified to be the sugar mills that comply with sustainable standard designated by Bon Sucro. The Company is one of the first listed companiest who received this standard certification.

February 8, 2019

On 8th February 2019 KTIS Bio Fertilizer Co., Ltd. (KTBF) which is the subsidiary of the Company has registered for 2 new trademarks named "Din Ylm" (Smiling Soil) and "Sai Duan Job Tong" (The golden hoe and earthworm). The trademark will be used for sale promotion and marketing of fertilizer to serve the variety of farmers' demand.

March 13, 2019

KTIS Bio Ethanol Company Limited ("KTBE"), a subsidiary of the Company Has invested in a group of companies Global Green Chemical Public Company Limited in the project (Nakhonsawan Biocomplex: NBC) Environmental Chemistry Business Which is located in Takhli district Nakhon Sawan Province

May 13, 2019

The company has approved the joint investment with Eurasia Light Industry Equipment Manufacturing Company Limited ("EAMC"), a machine manufacturer for container production from bagasse pulp and distributor of container from bagasse in China. Container plant from bagasse Which has a production capacity of 50 tons per day by having Enviroment Pulp and Packaging Company Limited ("EPAC"), a subsidiary of the Company Is a project company

Presently

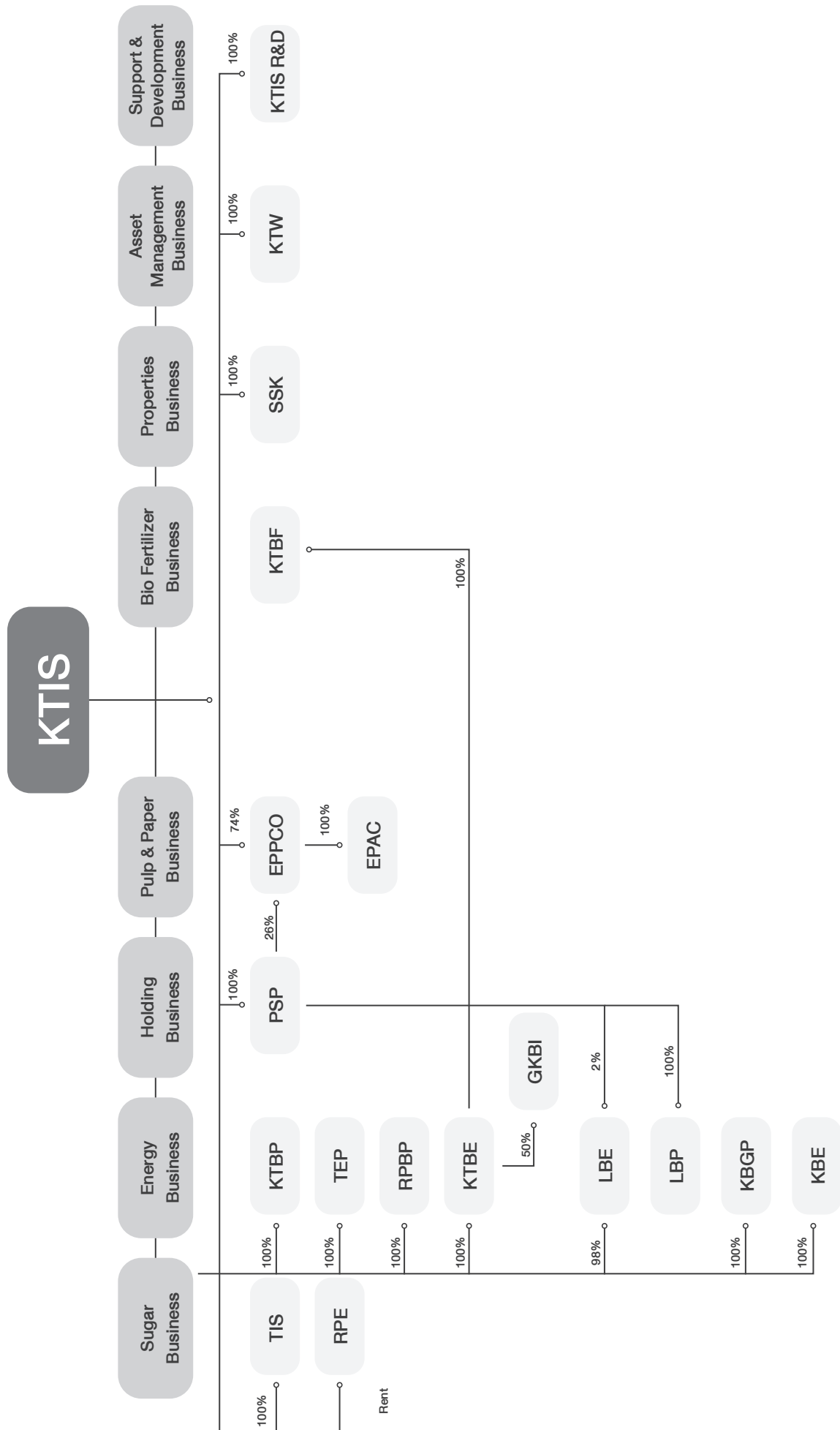
the Company had invested in 16 subsidiaries and leases fixed assets from Ruampol Enterprise Co., Ltd.(RPE) as detailed following :
(As at September 30,2019)

Subsidiary	Type of Business	Shareholding (%)
Thai Identity Sugar Factory Co., Ltd. (TIS)	Sugar production and distribution	100.0
KTIS Bioethanol Co., Ltd. (KTBE)	Molasses-based ethanol production and distribution	100.0
Environment Pulp and Paper Co., Ltd. (EPPCO)	Production and distribution of bleached bagasse pulp and Pulp Mold	100.0 ¹
Environment Pulp and Packaging Co., Ltd. (EPAC)	Production and distribution of Pulp Mold	100.0 through EPPCO
Kaset Thai Bio Power Co., Ltd. (KTBP)	Electricity generation	100.0
Thaiekaluck Power Co., Ltd.(TEP)	Electricity generation	100.0
Ruampol Bio Power Co., Ltd.(RPBP)	Electricity generation	100.0
KTIS Bio Fertiliser Co., Ltd.(KTBF)	Production and distribution of bio soil conditioner products	100.0 through KTBE
Permsinpattana Co., Ltd.(PSP)	A holding company which holds 26.0% shares of EPPCO	100.0
Sapsirikaset Co., Ltd.(SSK)	Land acquisition to support the group's business expansion	100.0
Lopburi Bioethanol Co., Ltd.(LBE)	Ethanol production and distribution (under consideration)	100.0 ²
Lopburi Biopower Co., Ltd.(LBP)	Electricity generation and sale (under consideration)	100.00 through PSP
KTIS Biogas Power Co., Ltd.(KBGP)	Electricity generation and sale (under consideration)	100.0
KTIS Bio Energy Co., Ltd.(KBE)	Ethanol production and distribution (under consideration)	100.0
Kaset Thai Wiwat Co., Ltd. ("KTW")	Support company's asset management	100.0
KTIS Research and Development Co., Ltd. ("KTIS R&D")	Support company's businesses and its growth aspiration.	100.0
GGC KTIS Bio Industrial Co., Ltd (GKBI)	Joint venture projects in industrial chemicals for environment	50.00 through KTBE

¹ Directly holds 74.0% of the total shares and directly holds 26.0% of the total shares through Permsinpattana Co., Ltd.

² Directly holds 98.0% of the total shares and directly holds 2.0% of the total shares through Permsinpattana Co., Ltd.

Corporate Business Structure (As at September 30, 2019)



Nature of Business

1. Revenue Structure

In 2019, the Company's income from sugar production and distribution was 68.9% of total revenues from sales and services of the Company. Moreover, the business income from the by-products of paper, pulp, ethanol and fertilizer 31.1% of the Company's sales and services. Details for 3 years were as follows:

	2017		2018 (9 months)		2019	
	Revenue (MB)	Percentage	Revenue (MB)	Percentage	Revenue (MB)	Percentage
1. Sugar and molasses sales revenue						
Domestic	5,326.6	30.4	3,878.5	22.4	3,398.5	21.1
International	8,178.0	46.7	9,178.4	53.0	7,708.9	47.8
Total sugar and molasses sales revenue	13,504.6	77.1	13,056.9	75.4	11,107.5	68.9
2. Pulp sales revenue						
Domestic	259.6	1.5	213.2	1.2	304.2	1.9
International	1,001.2	5.7	1,003.4	5.8	1,005.4	6.2
Total pulp sales revenue	1,260.8	7.2	1,216.6	7.0	1,309.5	8.1
3. Ethanol sales revenue						
Domestic	1,654.2	9.4	1,313.4	7.6	1,619.4	10.0
International	-	0.0	-	0.0	0.0	0.0
Total ethanol sales revenue	1,654.2	9.4	1,313.4	7.6	1,619.4	10.0
4. Other sales revenue						
Electricity sales revenue	583.7	3.3	1,131.2	6.5	1,456.8	9.0
Revenue from other sales and services	521.4	3.0	587.5	3.4	636.9	3.9
Total other sales revenue	1,105.1	6.3	1,718.7	9.9	2,093.6	13.0
Total revenue	17,524.6	100.0	17,305.7	100.0	16,130.0	100.0

Source : The Company's financial statements.

2. Nature of Business

Sugar : Production and Distribution Business

The capacity of the Company's sugar factories is approximately 88,000 tons of sugar cane per day. The Company produces and sales sugar to domestic and international customers. The products can be categorized into 3 types: refined sugar, white sugar, and raw sugar.

1) Raw Sugar

Raw sugar crystals are dark brown in color and the color index of raw sugar ranges from 1,001 – 3,800 ICUMSA . This type of sugar must be purified and processed into white sugar or refined sugar and cannot be consumed directly.

The Company specially produces J-spec raw sugar according to the Japanese regulatory standards, for export to Japan and acquires high J-spec raw market share.

2) White Sugar

White sugar is raw sugar that has been purified to remove impurities in sugar crystals. Its color is lighter than raw sugar, either light brown or white, and ranges from 46 – 1,000 ICUMSA. This type of product is typically used in soft drinks and convenience food businesses as well as household consumption.

3) Refined Sugar

Refined sugar is raw sugar that, similarly to white sugar, has been processed to remove impurities in sugar crystal. Refined sugar has a higher level of purity than white sugar and is crystal white in color with the color index of 0 – 45 ICUMSA. This type of product is suitable for industries which required sugar with high purity index such as pharmaceutical industry and beverage and energy drinks industry.

Details of the Company's sugar products are shown in the table below:

Product	Color (ICUMSA)	Polarization ² (%)	Moisture (%)
J-Spec Raw Sugar	1001 – 3800	96.00 – 97.99	Not exceeding 0.6
Raw Sugar	1001 – 3800	Not less than 98.00	Not exceeding 0.6
White Sugar	46 – 1000	Not less than 99.50	Not exceeding 0.04
Refined Sugar	0 – 45	Not less than 99.80	Not exceeding 0.04

Source : KTIS.

Sugar : Market Conditions and Competition

Global Market Conditions

Sugar is one of the most important commodities in the world. Major sugar producers are Brazil, India, European Union, Thailand and China. Asia is the continent that records the 2nd highest sugar output following the previous crop, accounting for 40.8% of the global output in the production year 2018/2019. Thailand is the world's 3rd largest sugar producer but the domestic sugar consumption rate of Thailand is relatively small for its production. As a result, Thailand can export sugar in large quantity, being the 2nd largest sugar exporting country in the world.

¹ ICUMSA is a standard unit for measuring sugar color factor. Sugar with higher purity has lower color index level.

² Polarization is the apparent sucrose content of sugar i.e. sugar with 99.5% polarization value has 99.5% of sucrose in its mass content. A higher level polarization means higher sucrose content or higher level of sugar quality .

Major Changes in Global Sugar Market in Past Decade

Sugar Trade Liberalization in Brazil

When the sugar trade liberalization was first introduced and the controls were eventually relinquished in Brazil, it had caused structural changes to Brazilian sugar industry and significant increase in the country's sugar exports. As Brazil is the largest exporter in the world market, any factors effect Brazilian sugar industry, will have material impact on the global sugar market such as the movement of Brazilian Real, Brazil's sugar and ethanol policies by Petrobras etc. Since 2018 Brazilian producer has been trying to maximize ethanol production due to world sugar price drop. On the other hand weaker Brazilian Real lower the dollar value of ethanol parity.

Low Sugar Production in EU Countries, but restart sugar export from 2017

In 2004, the World Trade Organization (WTO) ruled that EU's sugar subsidies violated the General Agreement on Tariffs and Trade (GATT) and thus cut its support for EU's sugar production. Therefore, EU's revised sugar Quota system and it limit sugar production and export. However from October 2017, this system was de-regulated and the export was jumped up to 3.8 million tons in 2017/2018 crop from previous 1.5 million tons. On the other hand regarding 2018/2019 crop, the sugar production be expected to reduce by about 3.2 million tons due to dry weather across most of the key growing areas.

Asian Economic Growth

The continuous economic growth of Asian countries, especially China, India and ASEAN countries, led to higher sugar consumption and production of the region. At present, Asia's sugar production is around 70-80 million tons per year while the consumption outpaces the production. Hence the need for sugar imports at more than 20.0 million tons each year.

Sweet Tax

In Thailand sweet tax was installed in October 2017, and Philippines and Malaysia also introduced sweet tax in January 2018 and in July 2019 respectively. Since 2016, WTO recommends to install sweet tax system in order to reduce soft drinks consumption, which leading to obesity. After that USA and Mexico started to install in part of the countries. And so far, India and UK have installed the sweet tax as well. In addition to this, especially in ASEAN, some other countries are considering about this kind of sweet tax system. Which movement might damper the expanding sugar consumption.

Higher Investment in Commodity Markets by Funds and Speculators

During the past 10 years, funds and speculators have increased their investment in commodity markets, especially agricultural commodities and sugar commodities. This has intensified the sugar price volatility and influence from non-fundamental factors, such as macro market, technical indicators, currencies, and ethanol parity.

Sugar Demand and Supply

In 2017/18, the global sugar output was 195.2 million tons, which was the record high number mainly due to big crop in India and Thailand. In 2018/2019, the global sugar output is forecast at approximately 186.3 million tons, which reduced by around 10 million tons mainly due to sugar mix reduction in Brazil. On the other hand the global sugar consumption is expected at around 183.4 million tons as historical high, but the number is still lower than sugar output. The global sugar supply/demand balance turned to big surplus in 2017/18 and is still surplus in 2018/19. Although CS Brazil production drop by maximizing ethanol production since 2018, it was not enough to compensate for the surplus. As a result, the global sugar price headed to downside and touched 10 years low of 9.83c/lb in August 2018, but after that has been remained mainly within a range between 11c/lb to 13c/lb.

In 2019/2020 the global supply/demand balance is expected to be turned deficit since 2016/17. The main reason is that India is expected to reduce its production below 30 million tons, which is around 5 million tons drop from the previous crop and Thailand is also forecast to drop sugar output mainly due to draught. Then the volume of deficit is expected at around 4.7 million tons.

Source : LMC, Monthly Sugar & Sweeteners Update, A supplement to the World Sugar Price View October 2019

In the year 2018/2019, Thai sugar production was 14.58 million tons while domestic consumption was estimated at 2.60 million tons which showed supply was much more than domestic demand and excess sugar about 11.98 million tons would be exported.

In the production year 2018/2019, Thailand have 56 sugar mill and recorded the total sugar output of 14.58 million tons as shown below :

Producer	Number of Sugar Factory of Each Producer	Sugar Output (Ton)	Market Share (%)
Mitr Phol Sugar Group	6	2,921,572.0406	20.04
Thai Roong Ruang Sugar Group	9	2,415,768.2645	16.57
Khon Kaen Sugar Group	5	1,144,412.9429	7.85
KTIS Group	3	1,032,848.9885	7.08
Korat Industry Sugar Group	2	1,000,257.7900	6.86
Cristalla Sugar Group	3	709,281.5000	4.86
Wangkanai Sugar Group	4	685,201.8650	4.70
Banpong Sugar Group	2	576,494.0270	3.95
Thai Kanchanaburi Sugar Group	2	420,091.1200	2.88
Kumphawapi Sugar Group	2	394,218.8800	2.70
Khonburi Sugar Group	1	372,650.3850	2.56
Mitr Kaset Sugar Group	2	300,934.5260	2.06
Ratchaburi Sugar Group	2	210,342.0760	1.44
Rayong Sugar Group	2	185,468.4100	1.27
Others	11	2,211,127.7850	15.16
Total	56	14,580,670.6005	100.00

Source : 2018/2019 Cane and Sugar Production Report as of the End of Cane-Crushing Period (Updated), Office of Cane and Sugar Board.

Sugar : Competitive Strategy

1) Security of Raw Material Supply

The Company has put importance to investments and developments in terms of academic sectors, service excellence, farmers' knowledge and cultivation system which contribute to better quality of sugar products and plantations. With a reliable source of quality raw material supplies, our sugar business and other downstream businesses are able to proceed for continuous and sustainable growth. Further, the Company has implemented the standard for sustainable agricultural products "Bon Sucro" into the Company's plantation area which requires the examination of land before plantation, enrichment and harvest.

2) Production Efficiency and Cost Reduction

The Company has steadily invested in our human resources and machineries in order to improve our production efficiency, and also planned to increase the sugar production capacity to capture the advantage of economies of scale, which will result in lower average costs. The Company employs a team of engineers who are capable of investing and developing our own machinery at the lower cost than purchases of imported machineries. In addition, this team of engineers can maintain and repair the majority of our machineries without third-party assistance.

3) Mitigation of Impact of Natural Disasters

Recognizing the threats from natural disasters, such as drought and pest infection, to our raw material supply, the Company has developed several corrective and preventive measures by introducing innovations and techniques derived from the Company's researches and studies for better agricultural productivity. For examples the drip irrigation system which can solve the issue of water supply shortage during the dry season and the biological pest control technique which makes use of natural enemies such as *Trichogramma* spp., *Cotesia* sp. and Earwigs.

4) Development of Value-Added Products

The Company strives to convert byproducts and waste into value-added products in order to increase the value for our shareholders and minimize waste from the sugar production processes. Under the visionary leadership of our management team, we aim to create an eco-friendly supply chain through the application of clean and eco-friendly technologies.

The Company has collaborated with Sumitomo Corporation Co., Ltd., our strategic partner and investor, and other world-class organization in continuously adding value to core products and byproducts.

Sugar : Distribution Channel

1) Industrial Customers

Industrial customers purchase sugar products with the intent of using them as raw materials in their production process and typically procure sugar products in a large volume under annual purchase agreement. The Company has successfully attracted and retained industrial customers who comprise a large proportion of the Company's sales revenue as a result of the Company's reliability in terms of stable supply, fine quality, and punctual delivery. The industrial customers are as follows,

Type of Industrial Customer						
	2017 (Sales Record)		Sep 30, 2018 (9 months) (Sales Record)		2019 (Sales Record)	
	Quantity ¹ (Ton)	%	Quantity ¹ (Ton)	%	Quantity ¹ (Ton)	%
Beverage Industry	80,532.950	51.42	72,908.670	52.01	50,607.250	54.81
Food Industry	23,123.700	14.76	20,795.700	14.83	7,616.150	8.25
Dairy Products Industry	52,929.300	33.80	49,146.365	32.92	33,838.05	36.65
Candy	30.00	0.02	330.00	0.24	270.20	0.29
Total	156,615.95	100.00	140,180.735	100.00	92,316.65	100.00

Source : KTIS

¹ Consolidated sales of the following 3 sugar factories:

1. Sugar factory operated by Kaset Thai International Sugar Corporation Pcl. (KTIS)
2. Sugar factory operated by Thai Identity Sugar Co., Ltd. (TIS)
3. Sugar factory which KTIS has leased from Ruampol Enterprise Co., Ltd. (RPE) under a long-term lease agreement)

2) Distributors

The Company sells sugar by way of the “ex-factory” method to distributors which comprise a smaller proportion of the Company’s sales revenue, compared to industrial customers. This is partially because the Company has to sell sugar to distributors at a discount from monthly average surveyed selling price in the country. The discount rates depend on the prevailing market conditions and demand.

3) Overseas Customers

Sugar exports to Japan accounts for approximately 60.0% of the Company’s total export sales. Most of overseas customers are sugar traders, including well-known companies such as Alvean Sugar, S.L., Wilmar Trading Pte Ltd., Czarnikow Ltd., Cofco Co Ltd., Sumitomo Corporation and Sucden etc.

Bleached Bagasse Pulp and Pulp Mold : Production and Distribution Business

The Company operates bleached bagasse pulp production and distribution business through EPPC which has the production capacity of approximately 100,000 tons per year. The factory is currently the only mill that can produce bleached bagasse pulp which is a byproduct from the Company’s sugar production process. EPPCO has 3 types of pulp products: dry pulp, wet pulp and packaging products from bagasse pulp (Pulp Mold)

1) Dry Pulp

Dry pulp is made from bagasse with a moisture content of about 10 - 12%. It weighs about 250 kilogram per bale and has a brightness of no less than 80% ISO with TAPPI dirt count of less than 10 ppm. Dry pulp is a core product of bleached bagasse pulp business.

2) Wet Pulp

Wet pulp is made from bagasse with moisture content of about 50. - 52.0%. It weighs about 225 kilograms per bale but has the same brightness and TAPPI dirt count as dry pulp. It can be used more easily than dry pulp in a paper manufacturing process because of its higher moisture content, which saves time in the re-boiling process. However, wet pulp has a shorter storage period than dry pulp and incurs higher transportation costs. Thus, EPPCO distributes wet pulp only to domestic customers.

3) Packaging products from bagasse pulp (Pulp Mold)

Pulp Mold used bagasse pulp 100% as raw material to produce different types of packaging products at EPPCO factory. The products will be bio-degradation which are Eco friendly products consistent with the demand trend for products that save the environment in both domestic market and worldwide. The products will add value to EPPCO bagasse pulp.

Bleached Bagasse Pulp : Market Conditions and Competition

1) Global Market

In 2019, the situation in pulp and paper market has been in the down side due to the trade war between China and U.S.A and the China’s policy of banning the import of low-quality paper. The price of short fiber pulp has decreased significantly especially Bleached Eucalyptus Wood Pulp. The average of short fiber pulp in Q2 of 2019 was between 540-585 usd/ton which decreased about 210-230 usd/ton from Q2 of 2018. The price is expected to fluctuate in this range until the end of 2019. For 2020, the price will continue to decrease, if the super power countries cannot settle down their trade war dispute.

1.1 Selling Price of Pulp in August 2018

In Chinese market, the selling price of long fiber pulp decreased from 860-875 usd/ton in August 2018 to 530-580 usd/ton in August 2019. The price of short fiber pulp decreased from 770-780 usd/ton in August 2018 to 470-500 usd/ton in August 2019. For other East Asian markets, the price of long fiber pulp decreased from 855-895 usd/ton in August 2018 to 530-580 usd/ton in August 2019, while the short fiber pulp decreased from 770-805 usd/ton in August 2018 to 480-520 usd/ton in August 2019.

Source : PPI ASIA's report as of September 3, 2018

1.2 2020 Global Market Outlook

In 2020, the pulp and paper industry situation trends to slow down from the world economic regression, especially the Eco-friendly packaging products in China that is effected by 25% increase of import duty imposed in U.S.A., so the price decrease and will not rise drastically. It is forecasted that there will be more expansion of industry of food container made from pure fiber in non-China countries. Further, the policies from other countries such as countries in EU, shall positively affect the pulp industry.

In 2019, there is not any investment to expand short pulp production from Eucalyptus in South America while the demand for paper pulp in this region will be gradually stable and causes price of paper pulp in the world market remains at low level for the whole year.

2) The Country Situation.

On Q1/2019 the pulp paper and publication export index showed an increase in paper pulp, cardboard and printing paper which goes in the same direction with the export. The export value decreases in the sections of paper pulp, paper and printing paper especially in China and southeast Asia countries which are important export countries. Further, the increase of import in pulp and paper products also affects the value of export.

2.1 Production Situation

In Q1/2018, the production index compared on QOQ% basis showed a decrease in paper pulp, cardboard and printing paper at 1.25%, 11.49% and 1.49% respectively. When compare on YOY% basis, the index decreased in all sections which are paper pulp, cardboard, Kraft paper, corrugated paper and printing paper 0.44%, 12.67%, 0.39%, 0.95% and 5.56% respectively from the decrease of domestic demand and the high volume import of pulp and paper products.

2.2 Export Situation of pulp and printing paper

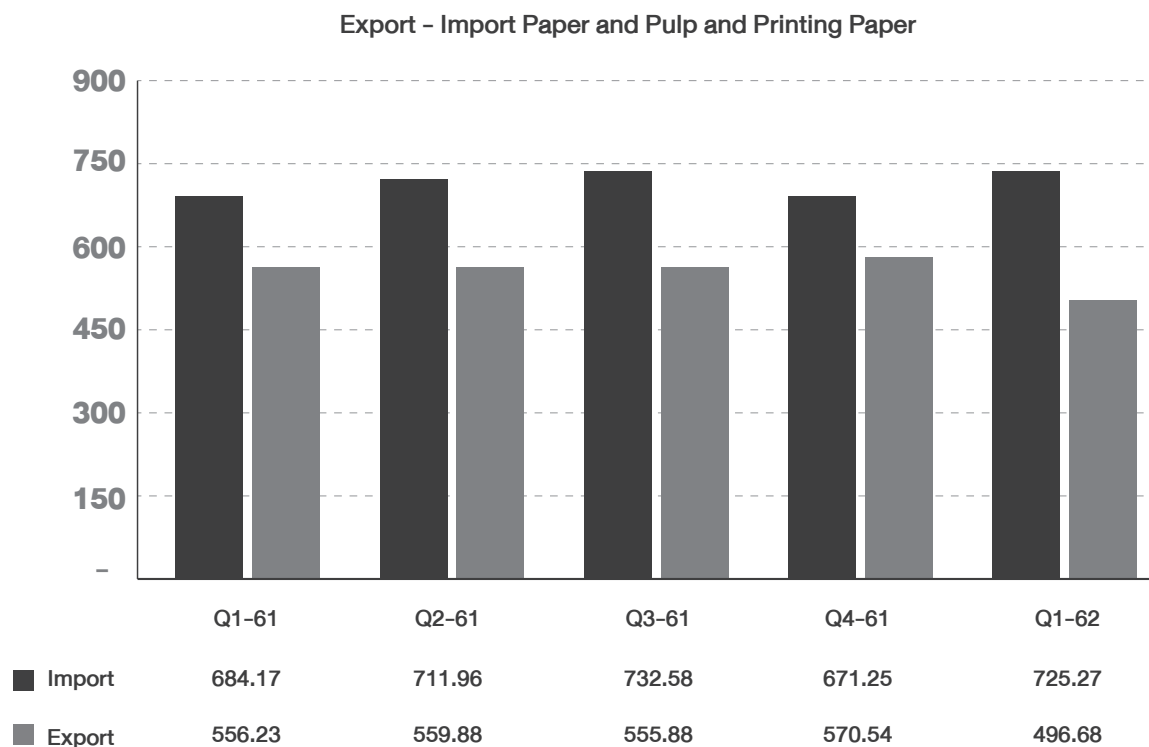
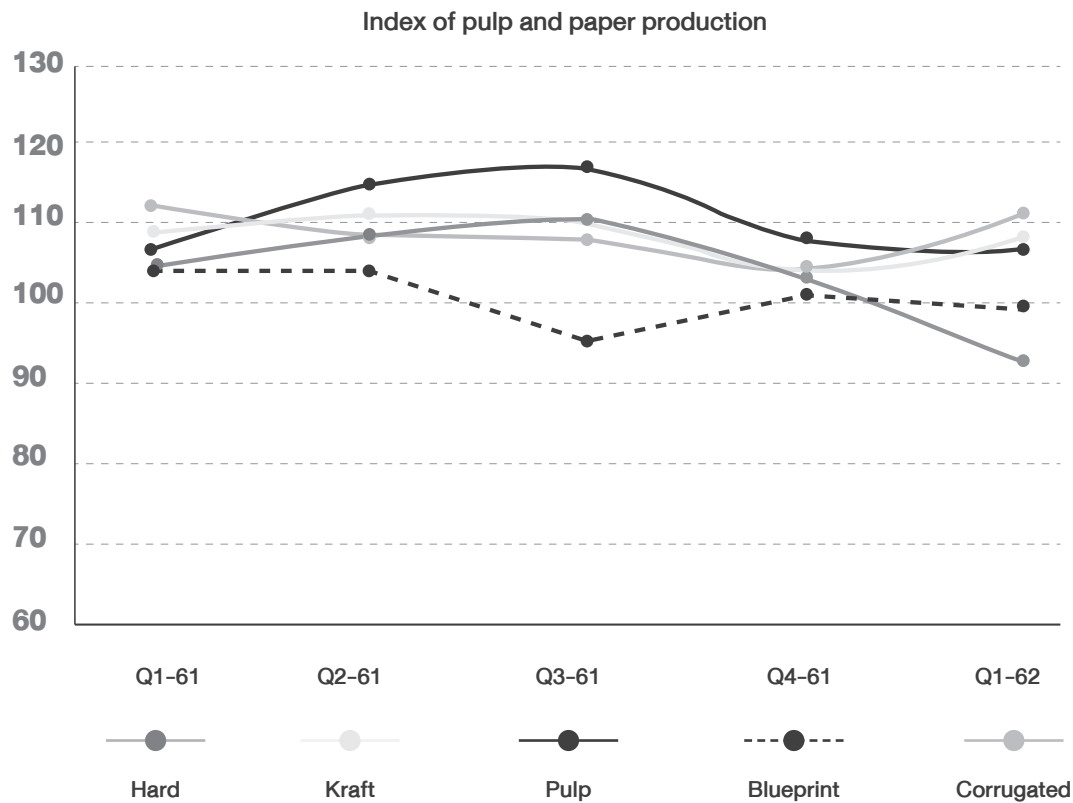
In Q1/2019, the export value amounted to USD 496.68 million which reduced 12.94% QOQ, the sections of pulp, paper and printing paper decreased 29.3%, 11.03% and 7.42% respectively due to the export of pulp made from reused paper and printing paper. The export of pulp, paper and printing paper compared on YOY% basis increased 10.71% due to the slowdown import from China and southeast Asia countries.

2.3 Import Situation of pulp and printing paper

In Q1/2019, the import value amounted to USD 725.27 million increased 8.05% QOQ and increased 6.01% YOY due to the increase of import of pulp and paper products which could not be domestically produced. The import of books and publication reduced 5.7% and 1.8% QOQ respectively as the printing media are substituted by digital media.

Related Government Policies

Pulp is one of 52 items of goods that the price control restriction is cancelled by the cabinet resolution due to the market stability and normality which the competition should be encouraged. The pulp producers and entrepreneur should closely update the price situation.



Production of Industry Sector Situation

Indicators	2017	2018									2019				
%YoY	Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Jan	Feb	Mar	Apr	May
MPI*	1.8	4.9	4.9	4.8	2.3	-0.1	5.7	0.8	1.2	3.6	0.6	-1.3	-2.7	1.5	-4.0

**MPI revised the industry index for the year 2019 by categorizing the industrial products according to the Thai Industrial Standard Classification 2009 (ISIC 2009) into 21 categories, 68 industrial sectors, 255 industrial products and indexes using the Laspeyres, base year 2016, Weighted Average with Value Added, Product Value, Value of sales and inventory value. According to the 2017 Business and Industrial Census of the National Statistical Office.

Industrial Economic Status in May 2019 as considered from Manufacturing Production Index (MPI) decreased 4.0% compared to the same period of the last year due to the regression of export for 5.8%.

Considering the three-month MPI (% YoY) MPI data, it is evident that the industrial production trends to slow down continuously as a decrease 1.3% in February, 2.7% in March and slightly decrease 1.5% in April.

Indicators	2018									2019				
%MoM	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May
MPI*	14.9	-1.5	-2.8	1.7	-2.7	2.1	0.9	-1.9	4.7	-2.6	9.5	-17.4	8.63	

For the 3 months of February, March and May, Manufacturing Production Index (MPI) has an exchange rate as follows: decrease 2.6% in March, increase 9.5% in April and decrease 17.4% in May. This circumstance is normal in these months due to less production because of less working days.

Bagasse pulp market situation 2019, and trends in 2020.

Demand for bagasse pulp both domestically and internationally continues. The environmental policies of serious ban on plastic and foam utensils in European countries and Tokyo Olympic 2020 which focuses on environmental issues will increase the demand of eco-friendly products and bagasse pulp. The bagasse pulp producers in China, Iran, India and Thailand will benefit from such demand but there will be more price competition. The severe decrease of short fiber pulp Eucalyptus Wood Pulp and the expansion of bagasse pulp production capacity in China and Iran to cover an increasing demand are the major factors that affect the decrease of bagasse pulp. The price competition is increasing to maintain the market share especially in China bagasse pulp market. Therefore, Chinese manufacturers have implemented cost cutting by adding more portion of short fiber wood pulp in to their products due to the cheaper price.

The unsettled trade war between the United States and China impacts of food packaging products made from bagasse pulp. By raising the tax rate to 25%, the trade in such products has slowed down as both trading partners need time to adjust themselves for these measurements, the consequence will be the higher price in U.S.A market.

For the company's own customers, there is still continuous demand for bagasse pulp. This group of customers produce environmentally-friendly packaging products and require bagasse pulp as raw material in order to create environmental image of the product in the printing paper and sanitary paper.

In 2019, the Company has adjusted down its sales price of bagasse pulp according to the price of world pulp by decreasing an average FOB price of 745 usd/ton in August 2018 to 715 usd/ton in August 2019. There were continuous orders from domestic market and overseas markets.

In 2020, the world economy and the domestic economy will continue to regress, if the trade war could not be settled. The demand for bagasse pulp will continue to grow, especially overseas exports that results from environmental policies in EU countries which focus on the environmental friendly products, from the expansion of the production of the environmental packaging industry in country and abroad and the expansion of KTIS' bagasse pulp utensils production line .

The company's bagasse pulp production in 2020 is expected to be at the same quantity in 2019 and costs of production will be controlled more or less. The sale price is expected to be lower than the average selling price in 2018 as the price being adjusted according to the world market.

The largest paper pulp manufacturers in 2018 were as follows,

Manufacturer.	Capacity of production (' 000 tons).	The type of the raw materials.
Double A	560	Eucalyptus wood.
Phoenix Pulp & Paper	240	Eucalyptus wood.
Panjapol Pulp Industry	110	Eucalyptus wood.
SCG Paper	107	Eucalyptus CTMP
EPPCO	100	Bagasse
Siam Cellulose	86	Eucalyptus wood.
Fiber Pattana	20	น้ำอ้อย UHT
Thai Gorilla Pulp	9	Palm leaves.
Total	1,232	

Source : 2016-2018 Directory of the Thai Pulp and Paper Industries Association (TPPIA).

Market situation of packaging products from bagasse pulp (pulp mold) 2018/2019

The growth of demand for Eco friendly packaging products, especially from bagasse pulp increases continuously. The large producers in China still have the production expansion plan to supply for the world's growing demand.

Thailand presently has a growing demand of pulp mold due to the encouragement and promotion from government and private sector that help drive the growth in 2019 and shall continue to grow in 2020. Therefore, the Company decided to expand the production capacity, the new factory will have the capacity of 50 tons per day, to serve the increasing demand and make the products become more accessible by consumers.

Bleached Bagasse Pulp : Competitive Strategy

1) Reliable Raw Material Source

EPPCO has a strong raw material security as its bagasse supply is primarily provided by the Company and factories in KTIS group which altogether record the cane-crushing capacity of more than 10,000,000 tons of cane per year. This enables EPPCO to effectively plan its bagasse-based production in advance.

With the raw material security, EPPCO can provide its clients with reasonable assurance of EPPCO's ability to satisfy their demand.

2) Low Cost of Raw Materials

EPPCO has lower production costs, compared to other pulp manufacturers, largely thanks to the short distance between EPPCO factory and the Company's factories being EPPCO's suppliers. The delivery of supply through conveyor belt system instead of trucks will lead to substantial save transportation costs.

3) Environmental Friendliness

Bleached bagasse pulp of EPPCO is virgin pulp which is made from bagasse and thus is environmentally friendly. The increasing environmental awareness has led to the rise in demand for EPPCO's eco-friendly products. EPPCO's bleached bagasse pulp factory is the first pulping factory that is awarded the ISO 22000 food safety accreditation and the GMP&HACCP certification from SGS (Thailand) Co., Ltd. which guarantee that its products are safe for consumption and can be used as raw material for food packaging production.

Bleached Bagasse Pulp : Distribution Channel

1) Domestic Distribution

EPPCO distributes bleached bagasse pulp directly to industrial customers on a monthly basis or as agreed with customers. Strategic customers of EPPCO include major leading paper product manufacturers in Thailand using eco-friendly pulp in their operations such as SCG Paper Pcl., Kimberly-Clark (Thailand) Co., Ltd., Berli Jucker Co. Ltd., Cellox Co. Ltd. and Biodegradable Packaging for Environment Co. Ltd. To promote customer satisfaction, EPPCO has technical sales personnel who are highly knowledgeable and can provide customers with useful information for correct and efficient use of bleached bagasse pulp

2) Overseas Customers

Generally, distribution of bleached bagasse pulp to international markets is made through brokers. Our sales through spot contracts comprise approximately 90.0% of our total export sales while the remaining 10.0% is under long-term contracts. To mitigate associated risks, our selection of brokers is based on their ability to penetrate markets which have strong pulp demands and their credibility. EPPCO's management team has implemented proactive marketing activities such as participation in trade expos to attract new customers. Sales through brokers enable EPPCO to determine the price and quantity of the product it intends to sell at its discretion, without having to negotiate with the end customers. EPPCO's revenue is primarily from international sales which accounted for approximately 70-78% of its total revenue during the year. EPPCO's brokers include leading international companies such as Zhejiang Welbon Pulp and Paper Group, Ecoplus Paper and Packaging (HK) Co., Ltd., OG Corporation etc.

Pulp Mold products : Distribution channel

The sales proportion target is about 90-95% for the foreign market and 5-10% for domestic market at the beginning. The demand of domestic and foreign countries for eco-friendly products are still high, so the company continues to develop the type and variety of products to cope with the needs of consumers both domestically and abroad in the future.

1) Export Sales

As the markets for Eco friendly packaging products are in Europe and America, so the company has to sell through the experienced sale agents and distributors for large volume distribution in order to reach the dealers and consumers which are better way than Original Equipment Manufacturer (OEM) or selling directly under its own brand abroad. In 2019 the Company sold pulp mold products about USD 2,250 per ton and in 2020 the price is expected to be not less than 2019.

2) Domestic Sales.

Domestic customers are environmental oriented group which the company has many distribution channels as follows,

- Large retail and modern trade stores (Big C, Lotus, Makro, The Mall, TOP, Central, Department Store, Seven Eleven) under own brand and/or OEM for large retail stores.
- Provincial wholesalers of packaging products, and sale agents across the country.
- Direct sales to organizations, government agencies, hospital, schools, universities and other institutions.
- Online Marketing (under development).

Ethanol : Production and Distribution Business

The Company operates ethanol production and distribution business through KTIS Bioethanol Co.,Ltd (KTBE) and uses molasses derived from the Company's sugar factories as a primary raw material with the maximum production capacity of 230,000 liters per day or 75,900,000 liters per year. Presently, it produces and distributes only industrial alcohol and fuel alcohol.

Ethanol : Market Conditions and Competition

1) Global Market Situation

Ethanol Price

The US ethanol price fell due to higher supply but lower demand. The ethanol average price in USA was Baht 15.70 per liter, decreased 20% YOY but remained unchanged from the previous quarter, while the ethanol prices for all grades in Brazil fell, in line with decreases in crude oil price. The average price of fuel-grade hydrous ethanol in Brazil was Baht 14.3 per liter, decreased 2.1% YOY but rose up 1.4% QOQ. The world ethanol price tends to increase following the forecast of rising crude oil price. The ethanol price in Brazil is forecasted to increase due to a shift to sugar reflecting upward trends of world sugar prices while lower sugarcane volume for the 2019/2020 crushing season.

Production

The US ethanol production slightly increased with an average volume of 167.3 million liters per day in Q2/2019, increased 2.3% YOY, whereas Brazil's ethanol production was 117.1 million liters per day, decreased 3.6% YOY as a result of lower sugarcane volume from the previous year.

Cost of Production

The cost of production in USA remained at the same level as the previous year of Baht 15.6 per liter (or USD 0.44 per liter).

Consumption

The US consumption was approximately 149.1 million liters per day, decreased 9.1% YOY due to ethanol price increased, whereas Brazil's consumption was approximately 86.1 million liters per day, increased 20.4% YOY due to ethanol price decreased, together with higher cars registered.

Export

In Q2/2019 (April-May), US export was 946.4 million liters, decreased 3.1% YOY, of which mainly exported to Brazil. While Brazil's export in Q2/2019 was 305.9 million liters increased 12.5% YOY, of which mainly exported to the US.

Source : the ethanol price situation reports, Thailand's Q2/2019 Bank of Thailand.

2) Ethanol : Domestic Market Conditions

Ethanol Price

In Q2/2019 domestic ethanol reference price was Baht 21.90 per liter, decreased 7.2% YOY and 1.8% QOQ, in line with lower raw material costs and a decrease in world crude oil price. Domestic ethanol price for the next quarter is expected to maintain the same level as the previous year due to lower costs of molasses and cassava as raw materials, specifically higher cassava supply pushes cassava price down.

Production

Thailand's ethanol production in Q2/2019 was at 4.2 million liters per day, increased 24.4% YOY, which mainly increased by ethanol production from cassava as lower production cost, thereby speed up production for stock.

Cost of Production

Costs of ethanol production decreased due to higher raw material supplies. Cost of molasses was Baht 22.1 per liter, decreased 14.4% YOY, whereas costs of cassava pellets and cassava chips were Baht 22.0 per liter and Baht 22.9 per liter, decreased 16.3% YOY and 19.3% YOY respectively.

Consumption

Thailand's ethanol consumption was 4.4 million liters per day, increased 8.4% YOY, in line with higher sale of gasohol E20 and E85 which increased 14.7% YOY, and 13.8% YOY respectively.

In 2019 (as of March 2019), Thailand had 26 ethanol factories which total production capacity was 6.250 million liters per day while the total consumption was 4.4 million liters per day. The major ethanol producers are:

	Company	Capacity (Liter/day)	Production Material
1	Mitr Phol BioFuel Co., Ltd.(Chaiyaphum)	500,000	Molasses
2	E85 Co., Ltd.	500,000	Cassava /Starch
3	Ubon Bio Ethanol Co.,Ltd	400,000	Cassava /Cassava Chips
4	T. P. K. Ethanol Co.,LTD Phase 1	340,000	Cassava Chips
5	Mitr Phol BioFuel Co., Ltd.(Kuchinarai ,Kalasin)	320,000	Molasses
6	Thai Roong Ruang Energy Co.,LTD.	300,000	Molasses
7	KSL Green Innovation Pcl. (Bo Ploi)	300,000	Molasses

	Company	Capacity (Liter/day)	Production Material
8	K I Ethanol Co.,Ltd	250,000	Molasses
9	KTIS Bioethanol Co.,Ltd	230,000	Molasses
10	Maesod Clean Energy Co., Ltd.	230,000	Cane juice
	Other	2,880,000	
Total		6,250,000	

Source : Department of Alternative Energy Development and Efficiency

Ethanol : Competitive Strategy

1) Product Variety

KTBE offers a wide range of products for different needs of customers in each industry. KTBE's ethanol plant is licensed to produce 3 different grades of ethanol products: potable alcohol, industrial alcohol and fuel alcohol. The product variety has contributed to competitive advantage in international markets over many other ethanol plants in Thailand which mostly are licensed to produce only fuel alcohol production for domestic distribution.

2) Reliable Product Delivery

KTBE's punctual and reliable product delivery to customers is one of its key strengths. With steady molasses supply from factories in KTIS Company for its ethanol production process, KTBE is safe from the raw material shortage issue and can punctually deliver products which are confident by its customers.

3) Product Quality

Committed to achieving excellent quality standards, KTBE has continuously attempted to develop the quality of its products. All ethanol products of KTBE are therefore meet regulatory quality standards. In addition, KTBE's distillation columns have been developed to accommodate the production of Korean B grade ethanol which is high quality product commonly sold in the international market.

4) Marketing Strategy

Recognizing the intensifying competition in the energy industry, KTBE has proactively formulated and implemented marketing strategy to grow its customer base, especially in offshore markets. This includes KTBE's regular participation in meetings and training courses arranged for domestic and international ethanol producers to reap benefits from opportunities to meet with customers and intermediaries as well as to continuously expand its customer base.

Ethanol : Distribution Channel

1) Domestic Customers

KTBE produces ethanol with 99.5% purity for domestic oil dealers to use for blending as biofuels to support the government's policy to promote the consumption of alternative energy and the reduction of imported fuels and crude oil. KTBE's major customers, defined as "traders" under Section 7², are PTT Plc., Thai Oil Plc. and Shell Company Of Thailand etc. As of 31 December 2017, revenue from domestic sales of fuel alcohol accounted for 100% of the total sale revenue.

2) Overseas Customers

KTBE's ethanol products are sold to overseas customers through distributors. Previously, KTBE exported industrial alcohol with 95.5% purity and fuel alcohol with 99.5% purity to overseas markets.

Following the implementation of the Ministry of Energy's policy to discontinue 91-octane gasoline sale on 1 January 2013, the rate of domestic ethanol consumption has risen and KTBE has not exported fuel alcohol and industrial alcohol to overseas markets.

Electricity : Generation and Distribution Business

The Company's sugar factories, bagasse pulp mill, ethanol plant and biomass power plants are equipped with electricity and steam generating modules which use bagasse, a byproduct from sugar production, as primary feedstock. The electricity and steam generated are used in the production processes of our 3 sugar factories and other factories. The surplus electricity is sold to the Electricity Generating Authority of Thailand (EGAT) and the Provincial Electricity Authorities (PEA) under the power purchase agreements (PPAs) which the present selling contracts are under both Feed-in Tariff term and adder term, with the total capacity of 152 MWh.

Additionally, the Company has joined the investment with Global Green Chemicals Public Company Limited or GGC to develop "Nakhon Sawan Bio- Complex" through a joint venture named GCC KTIS Bio Industrial Co.,Ltd., to run a sugarcane crushing factory, which produces ethanol from sugarcane juice, and an 85 MWh power plant, of which to be used internally and 34 MWh sold to grid.

Electricity : Market and Competition

1) Domestic Market and Industry

The Thailand Power Development Plan (PDP) 2018 consists of 4 principles, as follows:

- (1) Power plants in accordance with government policy to promote renewable sources of energy i.e. Municipal Solid Waste and Biomass-based Pracharath Power Project for three southernmost provinces
- (2) Fossil Fuel Power Plants which consist of EGAT power plants, Independent Power Producer (IPP) Small Power Producer (SPP), imported electricity, as follows:
 1. Set up main power plants to ensure energy stability in all 7 areas, namely Northern, North-Eastern, East, Western, Central, Southern, and metropolitan.
 2. Set up main power plants to ensure the reliability and security of the provincial power system where Electricity Generating Authority of Thailand (EGAT) is the power system administrator.
- (3) Power plants in accordance with the Alternative Energy Development Plan (AEDP) which consist of bio-gas, solar power, floating solar and hydro power, and other renewable energy, with targets to renew Power Purchase Agreement annually, and to stabilize retail selling prices with the electricity costs from production lines of not exceed Grid Parity.
- (4) Energy Conservation policy under Energy Efficiency Plan will consider only conservation measures with quality and price-competitiveness, which means prices will not exceed grid parity.

² Under Section 7, Chapter 1 Fuel Trade and Transportation of the Fuel Trade Act B.E. 2543, fuel traders whose total fuel trade volume, either in a particular fuel type or all types combined, equals 100,000 metric tons per year or higher, or fuel traders of only liquefied petroleum gas whose total trade volume equals 50,000 metric tons per year or higher must hold license granted by the Minister.

2) Domestic Electricity Consumption Situation

In 2019, the Net Peak Generation Requirement (GRP) of the EGAT system has a value of 30,853.20 megawatts, which occurred on May 2, 2019 (22.27 hrs.), Which is 8.88% higher than in 2018.

3) Domestic Electricity Generation Capacity

Under the new Power Development Plan (PDP) 2018–2037, Thailand's power production capacity from 3 systems will stand at 77,211 MW, with a new power generating capacity of 56,431 MW, up from 46,090 MW in 2017 and a retired power generating capacity of 25,310 MW during 2018–2037.

Details of the new power generating capacity of 56,431 MW are as shown below:

Classified by type of Power Plant

Renewable Energy Power Plant	20,766 MW	36.80%
Pump Storage Hydro Plant	500 MW	0.89%
Co-generation Power Plant	2,112 MW	3.76%
Combined Cycle Power Plant	13,156 MW	23.31%
Coal / Lignite Power Plant	1,740 MW	3.08%
Alternative Energy Power Plant	8,300 MW	14.71%
Import	5,857 MW	10.38%
Energy Conservation Measures	4,000 MW	7.09%
Total	56,431 MW	

Classified by power producer

As at July 2019-ended, the power generating capacity was at 43,034 MW, of which excluded Very Small Power Producer (VSPP), as following details:

EGAT	14,565.58 MW	33.90%
Independent Power Producer (IPP)	14,948.50 MW	34.74%
Small Power Producer (SPP)	9,618.32 MW	22.35%
Import	3,877.60 MW	9.01%
Other energy sources	28,444.42 MW	66.10%
Total	43,034.00 MW	

Classified by fuel type

Natural gas	72,644.50 GWH	61.75
Coal / Lignite	26,888.86 GWH	22.85%
Renewable (Hydro, other)	796.15 GWH	0.68%
Fuel oil	118.05 GWH	0.10%
Diesel	16,261.29 GWH	13.82%
Others (Lao, Malaysia, Lam Takhong Power Station)	927.42 GWH	0.79%
Total	117,636.27 GWH	

Note : excluding Very Small Power Producer (VSPP)

The Proportion of Renewable Energy for Electricity Generation

Renewable energy	Unit	Target 2036	2015	2016	2017	2018	2019 target
Wind	MW	3,002.00	233.90	507.04	627.82	1,017.82	1,506.82
Solar	MW	6,000.00	1,419.58	2,446.12	2,697.26	2,812.62	2,982.43
Waste	MW	550.00	131.68	145.28	191.47	317.82	317.82
Bio gas	MW	1,280.00	372.51	434.86	475.42	500.15	517.86
Small hydro power	MW	376.00	172.12	182.12	182.28	187.72	187.79
Bio mass	MW	5,570.00	2,726.60	2814.70	3,157.28	3,289.84	3,380.44
Large hydro power	MW	2,906.40	2,906.40	2,906.40	2,906.40	2,919.66	2,919.66
Total	MW	19,684.40	7,962.79	9,436.52	10,237.93	11,045.63	11,812.82

Electricity : Competitive Strategy

In addition to the production efficiency which the Company has consistently enhanced through the continuous improvement of the electricity generation process, feedstock is also another key success factor for the electricity business as bagasse from sugar production is the main feedstock source. The company, therefore, set out the energy saving policy to reduce production loss, which resulted in more bagasse as raw material for electricity generation. Additionally, the company encouraged more cultivations of sugarcane both vertically and horizontally for more sugarcane volume. Meanwhile, the cabinet's resolution on 11 June 2019 to reduce sugarcane burning, thus more fresh sugarcane delivered to the sugar mills, and cane trash can be used as feedstock for power plant. Meanwhile, the company has also researched on a variety of energy crops to identify additional feedstock sources. These will be beneficial to farmers and our Company to increase revenues and reduce electricity production costs at the same time

Electricity : Distribution Channel

Steam and electricity generated by the Company's power plants are used in our sugar factories and while the surplus electricity is sold to EGAT or PEA according to each power plant's contract.

Bio Soil Amendment : production and distribution business

The Company has its own bio soil amendment manufacturing plant in Nakhonsawan which processes filter cake and vinasse into bio soil amendment products; powder product and pellet product. KTIS Bio Fertiliser Company Limited (KTBF) was established at Taklee District, Tambon Nongpho, Nakhonsawan as arm of the Company's integrated sugar business. The plant produces and supplies bio soil amendment products to the Company's sugarcane farmers at 50,000 tons of powder product, 10,000 tons of pellet product.

Bio Soil Amendment : Market and Competition

Although the Bioeconomy as a part the government's Thailand 4.0 policy, which focuses on adding value to major economic crops i.e. sugarcane, rice, cassava etc., could help increase overall crop productions during the previous year. But the global sugar price, however, declined and caused the price of sugarcane decreased. So the sugarcane farmers had to control their costs of production which led to careful usage of chemical fertilizers and soil amendments. Most of them still believed to use chemical fertilizer for their crops in prior to bio fertilizers and bio soil amendments as it works faster. However, the company has developed strategies to promote the use of bio soil amendments together with chemical fertilizers which will reduce costs by using less chemical fertilizer, increase productivity and maintain soil quality for sustainable sugarcane plantation.

Bio Soil Amendment : Competitive Strategy

KTBF has targets and policies to encourage our contracted sugar cane farmers to use standard quality and cheap bio soil amendment for reducing their costs of production and also increasing their production yield per hectare that result to more revenues. The main policies are as follows,

- (1) The Company and farmers jointly analyze the bio soil amendment to identify which KTBF's products are suitable for their plantation.
- (2) As raw materials used in the bio soil amendment production are sourced among the Company, the products are sold at cheap price. Farmers can thus reduce their costs and increase productivity.
- (3) The Company treats the packaging as a priority, uses colored sacks and double seals for better durability.
- (4) The Company offers delivery services for its bio soil amendment products.
- (5) Periodic plant touring programs for the targeted farmers to see the production process and provide knowledge for proper products usage.
- (6) Run the demonstration farms so that the farmers are able to see the productivity resulted from the usage of bio soil amendment products.
- (7) The Company advertises its products and activities through advertising media and local radio stations.
- (8) The Company conducts the products requirement surveys from contracted farmers in order to make production plan.
- (9) The Company has many research projects coordinated with the Institute of science and technology of Thailand for developing the production standards to create the customer confidence.

Bio Soil Amendment:Distribution Channel

- (1) Sale to contracted cane farmers of the Company.
- (2) Sale to general customers.
- (3) Sale to merchants, agricultural cooperatives, Bank for Agriculture and Agricultural Cooperatives BAAC

Support business

KTIS Research and Development Co., Ltd. (KTRD) was founded in 2015 with the initial registered capital of Baht 1 million. KTRD later increased its registered capital up to Baht 10 million on 27 December 2016, and up to Baht 20 million on 26 January 2018, of which 100% of its total shares held by KTIS.

KTRD's VISION

KTRD aims to support KTIS's businesses, its growth, efficiency and sustainability in 3 aspects of developments, namely raw materials, production processes, and products.

KTRD has been conducting 6 research and development projects, valued Baht 35.8 million during 2018/2019, together with 19 projects, valued Baht 43.8 million during 2016/2017 and 2017/2018, which makes a total of 25 projects, valued Baht 79.6 million since 2016.

KTRD's research and development projects related to raw material development involve the project to develop a new sugarcane breed (KTIS 14) with high productivity to suit certain farming conditions, of which is expected to be launched to its contracted cane farmer in the next 2-3 years. Meanwhile, research and development projects in terms of products entail the study of the impact of planting soil and wastewater on tarramba and nepier, to which treated wastewater provides important nutrients for plant growth as well as helps reduce transportation costs, and the mature plants can be used in its biomass power plant. The product development concerned projects also includes the use of wastewater to formulate organic fertilizer that is suitable for sugarcane plantings.

During 2016-2019, KTRD has signed 10 Memoranda of Understanding (MoU) with 10 leading research and development institutions, specifically King Mongkut's University of Technology Thonburi, Chiang Mai University, Naresuan University, Thailand Institute of Scientific and Technological Research (TISTR), Khon Kaen University, Kasetsart University, Global Green Chemicals Public Company Limited, PTT Public Company Limited, and Thammasat University, with which conducted 6 research and development projects in 2018/2019, valued Baht 10.8 million

Research and development

Special interest projects

- (1) Development of sugarcane breeds to suit its cane farmers' farming conditions
- (2) Soil structure improvement and proper use of fertilizers to enhance crop yield and reduce costs
- (3) Efficient water use in agriculture to enhance crop yield and reduce costs of plantings
- (4) Agricultural machinery development
- (5) Waste utilization and waste-to-value creation in sugar and its byproduct industry

Raw material development and support plans

- (1) Research and select appropriate sugarcane breeds that suit its contracted cane farmers' farming conditions to maximize yield and productivity
- (2) Research on efficient water management system in cane plantings to maximize productivity
- (3) Research for the appropriate fertilizer formulae for cane plantation.
- (4) Research and trial the use of unmanned aerial vehicle, satellite imagery and artificial intelligence (AI) to monitor and assess cane quality and productivity, as well as evaluate damage from cane pest and diseases
- (5) Research on certain bacteria to help promote plant growth under drought stress condition
- (6) Use of nanotechnology to inhibit dispersed bacteria and reduce infection rate for productivity increase

Process development and support plans

- (1) Research or explore maintenance process optimization in sugar production to improve efficiency and reduce costs
- (2) Development of agricultural parts and tools to expand equipment lifetime and reduce investment costs
- (3) Research on certain bacteria that suit the ethanol production process
- (4) Improvement of molasses quality to maximize efficiency of ethanol production
- (5) Research or explore how to maintain fertilizer quality until packing
- (6) Improvement of pelleted fertilizer heat-dried process to minimize loss of organic matters
- (7) Improvement of disc granulator to get uniform pellets and minimize waste from fertilizer pellet production
- (8) Research on optimization of power consumption to increase efficiency and reduce costs of sugar production
- (9) Research on storage system to avoid excessive degradation of bagasse
- (10) Process improvement and process optimization

Product development and support plans

- (1) Research and trial the use of treated wastewater to increase the yield of sugarcane and other crops i.e. tarramba, and nepier
- (2) Research and trial to maximize the utilization of carbon dioxide from ethanol fermentation process and wastewater treatment process, thus reduce carbon dioxide emission pollution
- (3) Research on the utilization of treated wastewater from bagasse pulp production process to derive high value compounds for cosmetic industry
- (4) Research on extract of sugarcane leaves to derive high value compounds utilized in cosmetics applications
- (5) Research on the utilization and value creation of bagasse pit and coal
- (6) Improvement of organic fertilizer formulae and bio-chemical fertilizer formulae
- (7) Improvement of fertilizer formulae from sugar and byproduct industrial waste
- (8) Development of knowledge based system and new products in response to markets and to create domestic advantage and global competitiveness
- (9) Research and development of new green products using advanced technology and enhance researches for sustainable growth

Risk Factors

Risks associated with the Company's operations

1. The risk of fluctuation in foreign exchange

In the past year, Thai Baht currency was volatile compared to the US currency. The dramatic currency fluctuation has directly affected the group's business because more than 60% of its revenue is from exports of sugar products and the downstream businesses' eco-friendly products, and machinery imports. Therefore, company's income and investment expenses are also affected by the fluctuation of the exchange rate.

Moreover, the cost of sugar cane which is the major raw material of the sugar industry is determined by Thai Sugar cane and Sugar Co., Ltd. (TCSC) through its export of sugar. The export price composes of selling price and dollar exchange rate. The income after expenses from the sale of sugar made by TCSC and other sugar mills shall be the net income of the industry, such net income shall be distributed to the sugar cane farmers and the sugar mills in the proportion of 70:30 respectively in the form of sugar cane price paid to sugar cane farmers by sugar mills. Therefore, the exporting sugar mills at least must fix the export price and the exchange rate at equal rate to TCSC's rate which is the benchmark, so the actual income of the sugar mill shall not be less than the benchmarked income use in the calculation of income distribution to sugar cane farmers. If any sugar mill could sell with the lower price than the selling price made by TCSC, such sugar mill shall pay the higher than the standard price for sugar cane and bear the higher than the standard cost of production.

The risk protection from such exchange rate can have either positive or negative figure which will be recorded in the annual financial statements as the gain and loss on exchange rate. This is because of the difference between fixed forward rate and the spot rates on the goods delivery dates under the Accounting Standard Basis. The Company is aware of the risk protection policy without speculation.

2. Risks of World Sugar Price Volatility

Sugar is a product with high price volatility due to the movement of many factors such as weather conditions, production, consumption, supply-demand by which the fluctuation of world sugar prices depends on supply and demand of the producing countries and the consumer countries and also includes the fund speculation in futures commodity markets, economic factors, and fuel prices which correlate with the ethanol price used as automobiles' fuel made from sugar and molasses. All the aforementioned factors significantly affect the volatility of world sugar price.

The price volatility in the global market may adversely affect the Company's sales, particularly export sales, while the domestic sales are not directly impacted. As the cane prices rely on the sugar prices, so the low cane prices will demotivate cane farmers and cause them to reduce cane planting or cane caring, hence lower cane supply available for sugar production.

To reduce the risks associated with the high volatility of sugar prices in the global market, the Company has the Pricing Policy to control the pricing volume to be close to Quota B pricing volume determined by the export of TCSC. The sugar price will determine the sugar cane price which is the main cost of sugar production. The Company has additionally action plans to prevent negative effects not more than certain amounts for next year.

The Company also has a working team consisting of experts and officers from the international leading trading company, to monitor and manage the prices of exported sugar. The working team's analysts keep abreast of the sugar prices in global markets, i.e. the New York No 11 sugar futures market and the London refined sugar futures market, the world economy, fuel prices, production and consumption figures, demands, supplies and stocks on a daily basis.

Previously the Company significantly relied on the income from sugar business. Therefore, the Company was severely affected by the fluctuation of sugar price in world market. To handle such uncertainty, the Company has adjusted the direction of its business by diversification to businesses that could be synergized with the Company's potential such as biomass power plants which shall reduce the sole dependency of the Company's performance on sugar business.

3. International Trade Barriers Risk

At present, the major sugar export market of the Company is Japan. Therefore, changes in trade barriers introduced by importing countries such as tariffs and tax policies, sugar import quota, national rules, or trade membership agreements shall directly and adversely affect the income derived from the export. As risk mitigation measures, the Company keeps abreast of the news from various sources, concludes the future contracts in order to manage production planning, inventory and logistics management to ship products on time, and cooperate with Sumitomo Corporation which is our major strategic partner on analyzing and determining the best approaches to deal with or alleviate unfavorable impact in the way that will best benefit the Company.

Normally, raw sugar import of Japan was J-Spec grade for many years, and KTIS group is one of the major exporters for J-Spec raw sugar. After Japan has trade agreements with Australia, Japan has therefore reduced the import of J-Spec raw sugar and started to import more Hi-pol raw sugar from Australia, the Company has improved the machine so that it can produce more Hi-pol raw sugar and reduce J-Spec raw sugar to serve the market demand and additionally selling more super refined sugar than normal refined sugar in order to get a higher price.

Further, the Company keeps updating news of trading countries from the traders to assess the situation and mitigate negative effects. The Company has been working with Sumitomo Corporation to cooperation for the maximum advantages of the Company.

4. Risks of changes in government policies (Sugar production and distribution business)

Although, the concept to amend Sugar cane and Sugar Act B.E. 2527 began in the previous government term, but the cabinet of such government did not approve such concept, and such concept could not be presented into the legislative within its term. Therefore, the work of the sugar cane and sugar committee (CCS) is still governed by the current Sugar cane and Sugar Act B.E. 2527 until the ministry of industry should get the approval from the cabinet and later present to the parliament for the amendment of the law. Until now, the control, monitor and regulation issuance by the sugar cane and sugar committee (CCS), which governed by the current law, shall affect the cost and the performance of the company. The examples are the profit-sharing system which shall be calculated into sugar cane price, exporting regulation, domestic sugar price adjustment. Any amendment of the law shall definitely affect the performance of the company

Although the burnt cane reduction campaign by a penalty of burnt cane Baht 30 per kilogram and award to fresh cane Baht 120 per kilogram, the cabinet has additionally issued the resolution on 11th June 2019 to reduce the amount of burnt sugar cane to 5% within 3 years. The allowance for the burnt sugar cane in sugar mill will be 30% of all sugar cane received in the production year 2019/2020. Such allowance will be 20% of all sugar cane in the production year 2020/2021, and such allowance will be 5% of all sugar cane in the production year 2021/2022. Further, the measure of production efficiency control, which imposes each sugar mill to produce sugar at 94 NT not less than 90 kg, will be definitely implemented in the production year 2019/2020.

To minimize the risk in changes of regulations, the company has been working with sugar mills associations and sugar cane farmers association to create understanding with the authorities and reflect the necessity of both sugar mills and sugar cane farmers to the authorities. The company and sugar cane farmers association have been working with all contracting sugar cane farmers to comply with burnt sugar cane reduction measure, and support sugar cane farmers to obtain equipment for fresh sugar cane harvest. Such action will annually increase fresh sugar cane delivered to the company's mills which also significantly increases the production efficiency. To minimize the risk in the production, the company has significantly invested in the renovation of its machinery. Further, the company has issued the policy for sugar cane receiving process to create the aptness in terms of the sugar cane quantity taken per day, sugar cane quality, sugar cane contamination and minimization of sugar cane logistic time

5. Risk from sugar competition

The government has abolished the domestic sugar quota system since January 15, 2018. The free sale of domestic sugar has caused serious competition. Further, the government introduced the excise tax based on sugar quantity (sugar tax), so the domestic consumption by industrial sector did not grow as it should be although the production capacity has slightly increased. Moreover, the price in world market decrease continuously, the sale of the company has slowed down for these aforementioned factors. To handle such incident, the company has adjusted the strategy of domestic and international sale, by focusing on the improvement of products and services, cost reduction, improvement and development to serve the customer's need and also participated in the improvement and cost reduction processes of customers. And, such actions have satisfied the customers.

6. Risk from the uncertainty of government policies (ethanol business) and changes in energy policy.

Ethanol is a biofuel that has been clearly promoted and has target to be used as a combination of gasohol in the Alternative Energy Development Plan (AEDP). On 6th April 2019, the Royal Thai Government gazette published the announcement from the Prime Minister Office about the country reform plan on 11 issues which included energy issue that contains 20 years plan of energy for logistic. The relevant topic to ethanol is to increase the goal of ethanol consumption up to 11.3 million liters per day. The goal for 2036 is to increase the ethanol consumption up to 20% of average fuel consumption. Currently the ethanol consumption is 13% of average fuel consumption or average 4.4 million liters per day.

Over time, the growth of ethanol consumption was not consistent with the production and causes excess supply. As new ethanol plants occurred in 2019, the total production capacity of the country increased to 6.3 million liters per day whereas the actual average of production is 5.0 million liters per day and the quantity of molasses in the industry has slightly decreases. As the cost of ethanol production from molasses reduced in the same direction as the molasses volume, the consequence affected the company is the more severe price competition in ethanol market than the last year

Since the risk from the changes of the policy, the company as a membership of Thai Ethanol Manufacturing Association has consulted with the government agencies responsible for energy policy such as Office of Energy Policy and Planning (EPP), The Department of Alternative Energy Development and Efficiency (DEDE) and Biofuels Development Office etc. in order to accelerate the increase of ethanol consumption in consistent with production capacity through the fuel retail prices mechanism and funds paid into the oil fund for higher mixture of ethanol in gasoline i.e. E20 and E85 etc. and cancellation of gasohol 91.

However, if the domestic ethanol market became worse, the Company could produce high-quality alcohol for the international market as its good foreign customer relationship and Logistics plus high experience in export procedures.

Internal Risks

1. The Procurement Risk of Raw Material (Sugarcane) both quantity and quality

The drought in Thailand has been existed since the end of 2018 until the end of April 2019, and even in May 2019 the rainfall is not enough for sugar cane. Many sugar cane plantations were changed into other crops and the yield of remaining plantation significantly decreased. Rainfall in May 2019 is less than the standard, and the additional rainfall in August and September has slightly increased the quantity of sugar cane. The estimation of sugar cane plantation in the production year 2019/2020 shall be much decreased from 2018/2019 which shows the same outcome with the survey and sugar cane allocation made by the Sugar Cane Committee. Meanwhile the company anticipates that the reduction of sugar cane shall result in the reduction of sugar, and also affects that performance of the company. Further the competition of sugar cane procurement to maintain the market share may increase the cost of production.

To mitigate such risk the company has implemented these measures

- (1) To promote the harvest of fresh sugar cane, the company has been seriously explaining to sugar cane farmers about the agenda and promoting such agenda by the introduction of sugar cane harvesters, the arrangement of special financing by **Bank for Agriculture and Agricultural Cooperatives** to the purchase equipment for fresh sugar cane harvest, the implementation of fresh sugar cane receiving measure. The consequences are to prevent sugar cane from weight losing as being burnt and to increase of sugar cane quality.
- (2) The company seriously promoted the fertilization in the end of rainfall period between August to September, so the sugar cane shall grow by the combination of fertilizer and rainfall.
- (3) The management of harvest and logistic to reduce lead time from the harvest to the mill, the management shall help preserve the sugar contained in the sugar cane and the mill shall get the good quality raw material.
- (4) The determination of the appropriate production date, as the estimated quantity of sugar cane is not so much, the company can determine the operation date to be later. The consequences are that the sugar cane can sufficiently grow by later rainfall, fertilization and no rushing harvest, and the quality of sugar cane is expected to increase due to the later operation date.
- (5) The decrease of machinery load due to the less quantity and the more fresh sugar cane received, such measure shall increase the agility of the mill, reduce the lead time of sugar cane logistic which shall preserve the quality of sugar cane and prevent weight loss of sugar cane.
- (6) The investment in GKBI factory located in Nakhon Sawan Bio Complex, GKBI factory also uses sugar cane as its raw material. Therefore, it is the increase of sugar cane milling capacity. The new factory is determined to operate in the production year of 2020/2021, and it gains the interest from sugar cane farmers as the new opportunity. Therefore, the company increased the sugar cane purchase agreement by determine that the sugar cane farmer must deliver sugar cane for the company in the production year of 2019/2020 as a condition precedent of the agreement with GKBI.

2. The risk of bad debts from advance payment for sugar cane procurement.

Due to the down side of the price in world market and the changes in domestic selling system since 2018, the estimation of sugar cane price for the production year of 2020/2021 will not be better than the previous year. The estimated yield, which is decreased due to low amount of rainfall, also decreases the income of sugar cane farmers and their debt repayment capability. Therefore, the company has determined the measure to manage the bad debt advance payment for sugar cane procurement as follows:

- (1) To select and survey prospected land for plantation before financing, further there are other measure to mitigate the default such as collateral requirement, and joint investment.
- (2) To increase sugar cane farmers' income such as the increase of quantity and quality of sugar cane by fresh sugar cane harvest regarding to the cabinet resolution, the management of mill's machinery capacity, the determination of the appropriate production date and management of harvest and logistic, these measures shall increase the weight and quality of harvested sugar cane which means more income of sugar cane farmers. The fresh sugar cane harvest shall result in additional payment for fresh harvest and the burnt sugar cane's price will be reduced.
- (3) To manage the defaulting sugar cane farmers whom the company suspended the support, the defaulting sugar cane farmers whom considered to suspend the support will be asked to repay their debt within a year or there will be the collateral enforcement to prevent the risk of non-performing debt.

3. Risk of raw material shortages in pulp production.

Many countries have already canceled the use of utensils made of foam and plastic. As the company uses bagasse as the fuel of power plants and the remaining bagasse as the raw material for pulp manufacturing which caused an insufficiency of raw material in pulp mill, nowadays the company has developed the efficiency of the machinery to reduce the consumption of bagasse which results in more raw material for pulp manufacturing. Therefore, the company could respond to the increase of demand for both bleached and unbleached pulp. The company also serves the need of clients by the development of the machinery of pulp mill for the higher yield and the research for the substitutable raw material.

4. Risk of raw material shortages in producing electricity.

The Company still maintains its policy and focus on the electricity generation and distribution business, especially during the high volatility of sugar price. The electricity distribution of the Company was sold to the Electricity Generating Authority of Thailand and the Provincial Electricity Authority. The advantage of the company is the electricity sale contract with high volume of purchase. As the bagasse is the fuel of electricity production, the insufficient fuel shall cause the company to lose its income and affects the fuel insufficiency in sugar manufacturing process. So KTIS group has focused on expanding the sugar cane volume both vertically and horizontally in order to increase the amount of cane for sugar production and get more bagasse. In addition, the Company has invested in the improvement of machinery and production process to save more energy, both in sugar factories and electricity power plants in order to obtain more bagasse. Meanwhile, we have our subsidiary, KTIS Research and Development Co.,Ltd ("KTIS R&D"), to continuous study and research for alternative energy corps in order to prevent such risks and create the stability of electricity production and distribution business for future sustainable growth

Securities Details and Shareholding Structure

Securities of the Company

As at September 30, 2019 , the Company had registered capital Baht 3,888,000,010 and paid-up capital Baht 3,860,000,010. Ordinary shares 3,888,000,010 shares , par value Baht 1 per share.

Shareholders

As at October 31, 2019, major shareholders of the company as following:

No.	Name	No. of Shares	% of Total Shares
1	HATHAI JAROON EK HOLDING CO.,LTD ⁽²⁾	1,360,800,000	35.25
2	3S HOLDING COMPANY LIMITED ⁽¹⁾	972,000,010	25.18
3	BANK OF SINGAPORE LIMITED	243,138,600	6.30
4	MR.SIRAPAK SIRIVIRIYAKUL	190,698,000	4.94
5	DBS BANK LTD	128,000,000	3.32
6	MR.SIRAPAT SIRIVIRIYAKUL	120,892,900	3.13
7	MR.POOMLERK WANGPREEDALERTKUL	114,646,200	2.97
8	Group of KING WAN CORPORATION LIMITED	112,341,000	2.91
	KING WAN CORPORATION LIMITED	87,267,000	2.26
	KING WAN INDUSTRIES PTE. LTD.	25,074,000	0.65
9	MRS.NAWARAT WANGPREEDALERTKUL	97,504,426	2.53
10	MR.POOMRATA WANGPREEDALERTKUL	62,492,000	1.62
TOTAL		3,402,513,136	88.15

Remark (1.) The registered capital and paid up capital of **3S Holding Co.,Ltd** consists of 9,724,670 shares at par value of THB.100.00 per share or THB 972,467,000 At September 30, 2018, major shareholders of the company as following (exclude Treasury Stock)

No.	Name	No. of Shares	% of Total Shares
1	HATHAI JAROON EK HOLDING CO.,LTD ⁽²⁾	6,807,261	69.8
2	SUMITOMO CORPORATION	2,431,173	25.2
3	NISSIN SUGAR CO.,LTD	486,234	5.0
	OTHER	2	0.0
TOTAL		9,724,670	100.0

หมายเหตุ (2.) The registered capital and paid up capital of **Hathai Jaroorn Ek Holding Co., Ltd** consists of 909 shares at par value of THB. 25,000,000 per share or THB 22,725,000,000 At September 30, 2018, major shareholders of the company as following (exclude Treasury Stock)

No.	Name	No. of Shares	% of Total Shares
1	MS.NATHAYA SIRIVIRIYAKUL	133	14.6
2	MS.SIRAARPA SIRIVIRIYAKUL	93	10.2
3	MR.PRIN SIRIVIRIYAKUL	77	8.5
4	MR.SIRAPAK SIRIVIRIYAKUL	69	7.6
5	MR.SIRAPAT SIRIVIRIYAKUL	69	7.6
6	MR.POOMLERK WANGPREEDALERTKUL	65	7.2
7	MR.POOMRATA WANGPREEDALERTKUL	63	6.9
8	MR.PRASONG SIRIVIRIYAKUL	54	5.9
9	MS.SAISIRI SIRIVIRIYAKUL	53	5.8
10	MR.PRACH SIRIVIRIYAKUL	50	5.5
11	MR.PUN SIRIVIRIYAKUL	50	5.5
	OTHER	133	14.7
TOTAL		909	100.0

Agreement between the majority shareholders on the matter impacting the issuance and offer for sale of the securities or the management of Company on which the Company has countersigned.

- None -

Other Securities

Securities Name :	KTIS-WA
	the Warrant to purchase the ordinary shares of Kaset Thai International Sugar Corporation Public Company Limited issued and offered to the executives and employees of the Company
Type :	In named certificates and non-transferable
Term :	5 years from the date of the offering
Number of Warrants :	Not exceeding 28,000,000 units
Offering Price per Unit :	Baht 0 (zero baht)
Number of allocated ordinary shares :	Equivalent to the number of warrant issued and offered to accommodate the exercise rights (not exceeding 28,000,000 shares, at the par value of Baht 1 per share)
Exercise Ratio :	1 unit of warrant per 1 ordinary share (except for future adjustment on exercise rights, whereas the employees' rights will not be reduced)
Exercise Price :	Equivalent to initial offering price of Baht 10 per share
Secondary Market :	The Company will list the ordinary shares from the exercise as the listed securities on the Stock Exchange of Thailand
Exercise Date :	December 1, 2014
Expiration Date :	November 30, 2019
Allocation method :	Allocated directly to the executives and staffs of the Company who possess the qualifications as required in the Key Terms of the Issuance and Offer for Sale of the Warrants to the executives and staffs of the Company and/or subsidiaries.

Basis of the issuance of new shares to accommodate the change of exercise :	Upon the adjustment of the exercise price according to the conditions for rights adjustment as stipulated in the Terms and Conditions of the Warrants which is the event mentioned in the Notification of SEC Office.
Other rights and benefits apart from the normal rights and benefits of ordinary shares :	- None -
Exercise date :	The holder of warrant is entitled to exercise the warrants to purchase ordinary shares of the Company at every last business day upon the full term of 4 years and 6 months period from the date of warrant issuance. In this respect, the last exercise date shall be on the period of 5 business days before the term of warrant reaches 5 years from the date that the Company has issued and offered for sale of the warrant.
Exercise of warrants to purchase ordinary shares :	Except for the case that the executives and staffs are unable to exercise the warrants as specified in Conditions for the exercise of warrants, the holder of warrant is entitled to exercise the warrants to purchase the newly issued ordinary shares of the Company upon the full term of 4 years and 6 months period from the date that the Company issued and offered for sale of the warrants under exercise date.
Term of notifying the intention to exercise the warrants :	<p>The holder of warrant, who wishes to exercise the warrants to purchase ordinary shares of the Company, is required to notify the intention to exercise the rights to purchase ordinary shares under the warrants for each occasion during 9.00 a.m. to 3.00 p.m. within 5 business days prior to each exercise date. In case that the exercise date is on the holiday of the Company, such exercise date shall be postponed to be the last business day prior to the exercise date of such occasion (herein after referred to as “Term of notifying the intention to exercise the warrants”). Except for the case of declaring the intention for the last exercise of warrants, the intention must be declared during 15 business days before the last exercise date (hereinafter referred to as “Term of notifying the intention for the last exercise of warrants”).</p> <p>The Company shall notify the news and additional details (if any) regarding the term of notifying the intention to exercise the warrants, the term of notifying the intention for the last exercise of warrants, exercise ratio, exercise price, exercise term, details of bank account for the subscription of warrants and the contact address to exercise the warrants, by posting at the Company’s head office or delivering the letter to the units that the holder of warrant is engaged with or delivering in form of an electronic mail to the holder of warrant for at least 7 business days prior to the term of notifying the intention to exercise the warrants of each occasion.</p> <p>For the last exercise date, the Company shall deliver such details to the holder of warrant by delivering the letter to the units that the holder of warrant is engaged with or delivering in form of an electronic mail for at least 15 business days prior to the term of notifying the intention for the last exercise of warrants.</p>

**Conditions for the exercise
of warrants :**

- The holder of warrant must possess a status in capacity of the executives and staffs on such exercise date except for the case as specified in next clause.
- The exceptions are as follows:
 - (a) In case that the holder of warrant's status in capacity of the executives and staffs are terminated due to the death, disappearance, severe injury or physical disability to the degree that is no longer functional, or other causes that the Management Department deems appropriate to allow such person, or the heirs, or the guardian, or the curator of such person to exercise the rights for purchasing the shares under the warrants in substitution of such executives and staffs throughout the term of such allocated warrants.
 - (b) In case that the status in capacity of the executives and staffs are terminated due to the retirement, the rights to purchase the shares under the warrants can be exercised throughout the term of such allocated warrants.
 - (c) In case that the status in capacity of the executives and staffs are terminated due to the termination or dismissal of employment without fault, or such status in capacity of the executives and staffs are terminated due to the change of control in the Company or subsidiaries, these cases shall be subject to the discretion of the Management Department whether to allow the exercise of warrants granted to the executives or staffs as it deems reasonable and appropriate on a case by case basis.
- Unless the Management Department determines otherwise, in case that the holder of warrant's status in capacity of the executives and staffs are terminated due to the resignation, or the discharge or the termination or dismissal of employment base on the fault, the holder of warrant shall no longer be able to exercise the allocated warrants. In addition, the holder of warrant must return the warrants, of the entire portion which is not yet exercised, currently held by him to the Company forthwith in order for the Management Department to allocate to the other executives and staffs of the Company or subsidiaries as it deems appropriate.
- Should the executives and staffs do not exercise the rights to purchase the ordinary shares under the warrants or exercise the rights not in full and such warrant is expired according to its term, it shall be deemed that the executives and staffs of the Company and/or subsidiaries waive their rights to exercise such remaining warrants. Such executives and staffs are not entitled to claim any damages from the Company.
- The Management Department has an absolute power to consider determining or amending the conditions for the exercise of warrants otherwise which may be different from the above-mentioned conditions.

Warrant registrar :

Thailand Securities Depository Company Limited

Dividend Policy

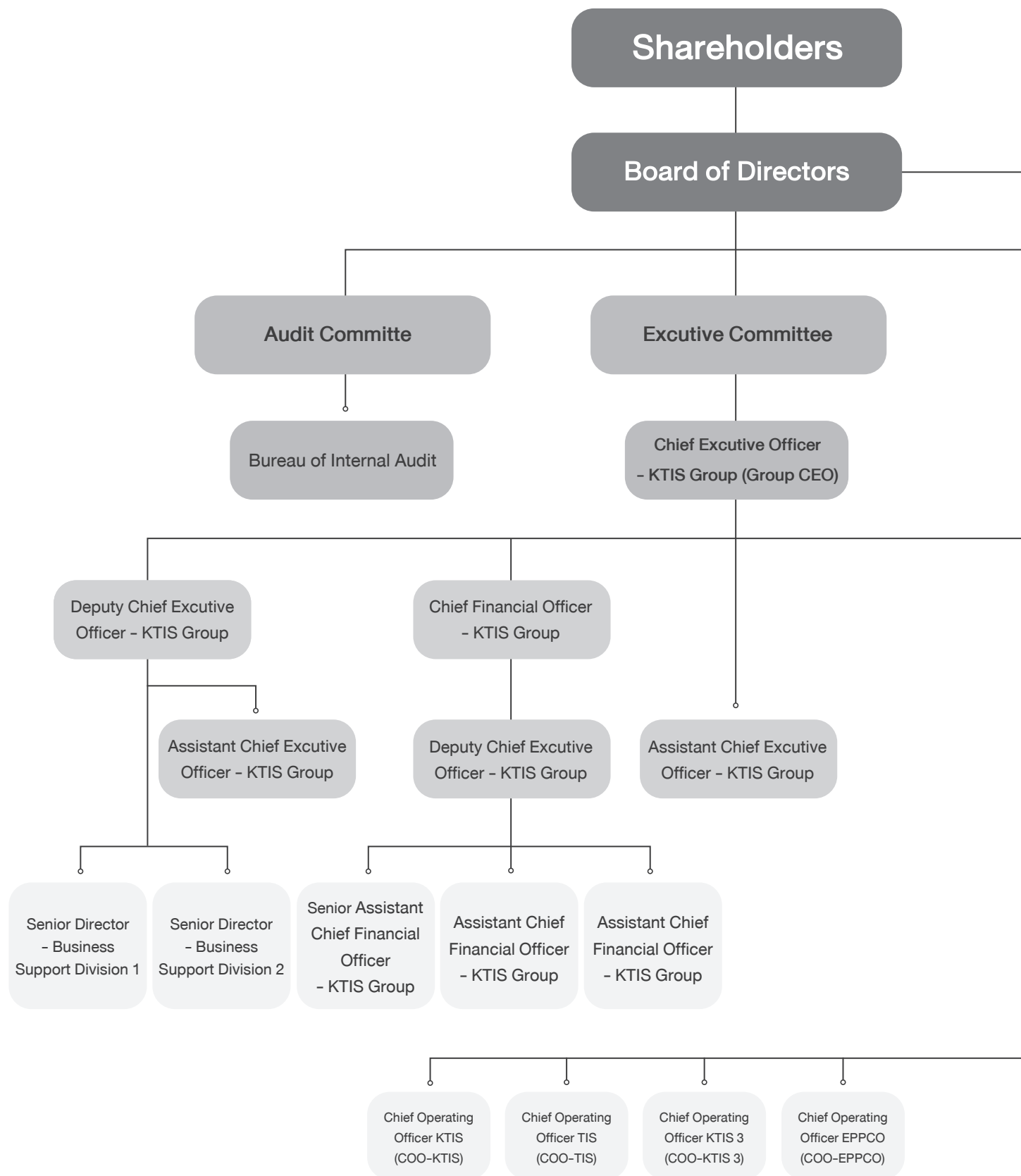
It is the Company's policy to pay out dividend at a minimum of 50% of its net profit according to the Company's separate financial statements, after the deduction of all legal reserves and provisions pursuant to the Company's Articles of Association and applicable laws, unless prohibited by necessities or loan agreements. Such dividend payment, according to the Board's judgment, shall not have material effects on normal business operations of the Company and shall be for the best interest of the shareholders. Annual dividend payments shall be proposed through the Board to the shareholders' meeting for approval whereas the interim dividend payment shall be subject to the Board's approval and reported to a subsequent shareholders' meeting for acknowledgment. The Company may propose to shareholders' to approve the non-payment of dividend in order to allocate the funds to investment projects as and where appropriate.

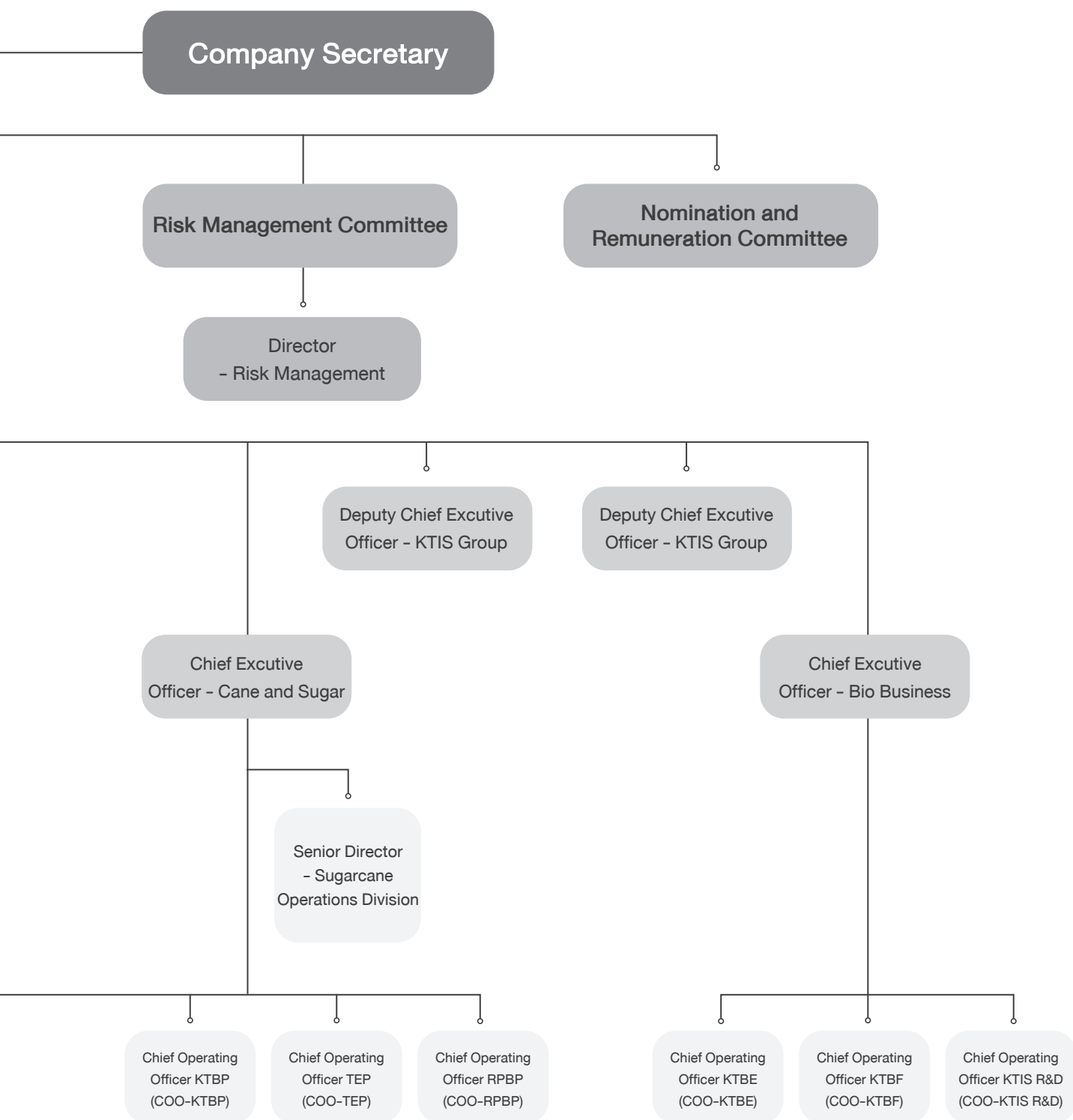
The Company's subsidiaries have the policy to pay dividend at a minimum of 50% of their net profit according to their financial statements, after the deduction of corporate income tax, statutory reserves and all other provisions. Considerations will also be given to their cash flow, financial status, liquidity position and investment plans at a particular period. Among companies in KTIS group.

Details of dividends	2017	2018	2019 (Proposed)
1. Net Profit (Baht)	666,124,903	315,548,967	379,160,109
2. Number of shares			
2.1 Number of shares at interim dividend	-	-	-
2.2 Number of shares at the annual dividend	3,860,000,010	3,860,000,010	3,860,000,010
3. Total dividend per share (Baht : Share)			
3.1 Interim dividend (Baht : Share)	-	-	-
3.2 annual dividend (Baht : Share)	0.15	0.15	0.15
4. Total dividends paid (Baht)*	579,000,001.50	579,000,001.50	579,000,001.50
5. Dividend Payout Ratio	86.92%	183.48%	152.71%

Remark In 2018, the Company has paid the dividend from (a) annual operating result of 231,600,000.60 Baht at a rate of 0.06 Baht per share (73.40 percent of the net profit from the operation-specific financial statement of 2018) and (b) accumulated profit of 347,400,000.90 Baht at the rate of 0.09 Baht per share.

Management Structure





Management Structure

We have five committees, namely, the board of directors (our “Board” and the members of the Board, “Directors”), the Audit Committee, the Risk Management Committee, the Nomination and Remuneration Committee and the Executive Committee.

Board of Directors

As at September 30, 2019, the structure of the board of directors consist of 15 members and 5 independent directors as follow:

Name	Position	Directors who are Authorized Signatories	Date to Appointment	Number of Meeting Attended in 2019
1. Mr.Pricha Attavipach	Chairman	Group 2	January 29, 2013	6/6
2. Mr.Sirivuthi Siamphakdee	Vice-Chairman	Group 2	January 29, 2013	6/6
3. Mr.Parphan Siriviriyakul	Director	Group 1	January 29, 2013	6/6
4. Mr.Nathapun Siriviriyakul	Director	Group 1	January 29, 2013	6/6
5. Mrs.Darat Vibhatakalasa	Director	Group 1	January 29, 2013	6/6
6. Mr.Prasert Siriviriyakul	Director	Group 1	January 29, 2013	6/6
7. Mr.Phoonsak Boonsalee	Independent Director	-	January 29, 2013	5/6
8. Mr.Apichart Noochprayoon	Director	Group 2	January 29, 2013	6/6
9. Mr.Kunihiko Tahara	Director	-	May 12, 2017	6/6
10. Ms.Chua Eng Eng	Director	Group 2	January 29, 2013	2/6
11. Mr.Kraitit Nilkuha	Independent Director/Chairman of Audit Committee	-	February 26, 2014	6/6
12. Mr.Sathaporn Kotheeranurak	Independent Director/Member of Audit Committee	-	January 29, 2013	6/6
13. Acting Sub Lt. T-rayooth Changpetch	Independent Director/Member of Audit Committee	-	January 29, 2013	6/6
14. Mr.Issakan Krivithaya	Independent Director	-	January 29, 2013	6/6
15. Mr.Sirapak Siriviriyakul	Director	Group 1	January 29, 2013	6/6

Mr.Poomrerk Wangpreedalertkul is the company secretary.

Independent Directors of KTIS :

The present Independent Directors is equivalent to one-third of total board members. The qualification of independent director as specified by the Company is in compliance with the regulation of the Securities and Exchange Commission (SEC) and Stock Exchange of Thailand (SET), as committed to good governance as follows:

- holding shares not exceeding 1 percent of the total number of voting rights of the Company, its parent company, subsidiary, affiliate or juristic person which may have conflicts of interest, including the shares held by related persons of the independent director;
- neither being nor having been an executive director, employee, staff, or advisor who receives salary, or a controlling person of the Company, its parent company, subsidiary, affiliate, same level subsidiary or juristic person who may have conflicts of interest unless the foregoing status has ended not less than 2 years prior to the date of appointment;
- not being a person related by blood or registration under laws, such as father, mother, spouse, sibling, and child, including spouse of the children, executives, major shareholders, controlling persons, or persons to be nominated as executive or controlling persons of the Company or its subsidiary;
- not having a business relationship with the Company, its parent company, subsidiary, affiliate or juristic person who may have conflicts of interest, in the manner which may interfere with his independent judgement, and neither being nor having been a major shareholder, non independent director or executive of any person having a business relationship with the Company, its parent company, subsidiary, affiliate or juristic person who may have conflicts of interest unless the foregoing relationship has ended not less than 2 years prior to the date of appointment.

The term 'business relationship' in the aforementioned under paragraph one includes any normal business transaction, rental or lease of immovable property, transaction relating to assets or services or grant or receipt of financial assistance through receiving or extending loans, guarantee, providing assets as collateral, including any other similar actions, which result in the Company or his counterparty being subject to indebtedness payable to the other party in the amount of 3 percent or more of the net tangible assets of the Company or Baht 20 million or more, whichever is lower. The amount of such indebtedness shall be calculated according to the calculation method for value of connected transactions under the Notification of the Capital Market Supervisory Board governing rules on connected transactions mutatis mutandis. The combination of such indebtedness shall include indebtedness taking place during the course of one year prior to the date on which the business relationship with the person commences; neither being nor having been an auditor of the Company, its parent company, subsidiary, affiliate or juristic person who may have conflicts of interest, and not being a major shareholder, non-independent director, executive or partner of an audit firm which employs auditors of the Company, its parent company, subsidiary, affiliate or juristic person who may have conflicts of interest unless the foregoing relationship has ended not less than 2 years from the date of appointment;

- neither being nor having been any professional advisor including legal advisor or financial advisor who receives an annual service fee exceeding Baht 2 million from the Company, its parent company, subsidiary, affiliate or juristic person who may have conflicts of interest, and
- neither being nor having been a major shareholder, non-independent director, executive or partner of the professional advisor unless the foregoing relationship has ended not less than 2 years from the date of appointment;
- not being a director who has been appointed as a representative of the Company's director, major shareholder or shareholders who are related to the Company's major shareholder;

- not operating any business which has the same nature as and is in significant competition with the business of the Company or subsidiary, or not being a principal partner in any partnership, or not being an executive director, employee, staff, or advisor who receives salary; or holding shares not exceeding 1 percent of the total number of voting rights of any other company operating a business which has the same nature as and is in significant competition with the business of the Company or subsidiary;
- not having any characteristics which make him incapable of expressing independent opinions with regard to the Company's business affairs.

After having been appointed as independent director with qualifications complying with the criteria under (1) to (9) of paragraph one, the independent director may be assigned by the board of directors to take part in the business decision of the Company, its parent company, subsidiary, affiliate, same level subsidiary or juristic person who may have conflicts of interest on the condition that such decision must be a collective one.

Directors who are Authorized Signatories :

Our authorized signatories can be divided into the two following groups:

Group 1	Group 2
1. Mr.Parphan Siriviriyakul	1. Ms.Chua Eng Eng
2. Mrs.Darat Vibhatakalasa	2. Mr.Sirivuthi Siamphakdee
3. Mr.Prasert Siriviriyakul	3. Mr.Apichart Noochprayoon
4. Mr.Nathapun Siriviriyakul	4. Mr.Pricha Attavipach
5. Mr.Sirapak Siriviriyakul	

Any two Directors from Group 1, or any one Director from group 1 together with any one Director from Group 2, may jointly sign on our behalf and stamped by the Company Stamp.

Term of Directorship :

One-third of all the current Directors shall resign at every annual general meeting of the shareholders. If the total number of Directors is not a multiple of three, the number of Directors closest to one-third of the total number of Directors on the Board shall retire from office. The Directors retiring from office in the first two years following our listing on the SET shall be selected by way of drawing lots. In the subsequent years, the Directors who have held office for the longest time shall retire. A retiring Director is eligible for re-election.

Scope of power and duties and responsibility of our Board :

- The Board shall perform its duties with due diligence and honesty in accordance with the law our business objectives, our Articles of Association and resolutions of our Board meetings and shareholders' meetings;
- The Board shall consider and approve the vision, business strategies, business direction business policy, targets, guidelines, operational plan and annual budget as prepared by the Executive Committee and Management;
- The Board shall oversee the performance of the Executive Committee, the Chief Executive Officer, the Management or any other persons assigned to perform such duties, and ensure that they conform with policies that have been set out by the Board;

- The Board shall continuously monitor our performance and operations and ensure that they are inline with our action plan and budget;
- The Board shall ensure that we adopt appropriate and efficient accounting systems, and have implemented internal control and audit systems;
- The Board shall prepare balance sheets and profit and loss statements on the last day of our financial period, and shall execute such financial statements prior to submitting them at the annual general meeting of shareholders for further approval;
- Prior to presenting the proposal to the annual general meeting of shareholders for approval, the Board is to consider the selection and nomination of auditors and to determine their remuneration as proposed by the Audit Committee;
- The Board shall implement a written corporate governance policy to ensure that the interests of each group of stakeholders is equally protected;
- In appointing Directors, the Board shall appoint persons who have the requisite qualifications and who are not prohibited characters as prescribed by the Public Limited Company Act B.E. 2535 (1992) (as amended), the Securities Act, and any relevant notifications, rules and/or regulations. The Board shall also determine the remuneration of the Directors as proposed by the Nomination and Remuneration Committee before further submitting the proposal to a shareholders' meeting for approval;
- The Board shall be responsible for the appointment of our sub-committee members, and shall prescribe the power and responsibilities of such sub-committees;
- The Board shall ensure that our authorized signatories are changed from time to time
- The Board shall appoint Executives in accordance with the definitions prescribed by the SEC or the Capital Market Supervisory Board. The Board shall also appoint the Company Secretary and determine the remuneration of our Executives;
- If necessary, the Board shall seek professional advice from third-party organizations to facilitate its decision-making; and
- The Board shall encourage our Directors and Executives to participate in seminars conducted by the Thai Institute of Directors.

However, the Board or its grantee shall not approve transactions in which the Board or its grantee or any person who may have any conflicts of interest (as defined in the notification of the SEC or the Capital Market Supervisory Board) or who may benefit in any manner which may give rise to a conflict of interest with the Company unless such transaction is consistent with our internal policies and criteria approved by our shareholders or the Board.

Category of Directors:

The table below shows the category of Directors in 2019.

Name	Non-Executive Director	Independent Director	Executive Director
Mr.Pricha Attavipach			●
Mr.Sirivuthi Siamphakdee			●
Mr.Parphan Siriviriyakul			●
Mr.Nathapun Siriviriyakul			●
Mrs.Darat Vibhatakalasa			●
Mr.Prasert Siriviriyakul			●

Name	Non-Executive Director	Independent Director	Executive Director
Mr.Phoonsak Boonsalee	●	●	
Mr.Apichart Noochprayoon			●
Mr.Kunihiko Tahara			●
Ms.Chua Eng Eng			●
Mr.Krairit Nilkuha	●	●	
Mr.Sathaporn Kotheeranurak	●	●	
Acting Sub Lt. T-rayooth Changpetch	●	●	
Mr.Issakan Krivitthaya	●	●	
Mr.Sirapak Siriviriyakul			●

Evaluation of Board of Directors :

To comply with the corporate governance principle, the Board has undertaken the performance evaluation of the Board and individual director at least annually by using the evaluation form developed by the Stock Exchange of Thailand (SET). Based on the 2019 evaluation, the overall rating under each category is as follows:

Evaluation Category	Performance of Individual Directors	Board Performance
1. Board structure and qualifications of directors	4.64	4.59
2. Board meeting	4.66	4.62
3. Roles, duties and responsibilities of Board	4.70	4.71
4. Performance of duties of directors	-	4.74
5. Relationship with the management	-	4.74
6. Self-development of directors and executive development	-	4.56
Average	4.68	4.65

Remark: 1. Total score = 5

2. Performance evaluation of Individual Directors have only 3 category.

Onboarding Program for New Directors :

The Company has arranged an onboarding program for new directors which covers the Company's business overview and the following topics:

- (1) Relevant regulatory framework (legal requirements, the Cabinet's resolution, rules and regulations)
- (2) Operations and activities
- (3) Major projects
- (4) Organizational development and business development
- (5) Corporate governance
- (6) Corporate social responsibility

As part of the onboarding program, new directors visit the Company's plants and operating sites, and are provided with information about the Company's Board of Directors and executives in support of their duty of governance in the following dimensions:

- (1) Vision, mission, values and purposes of the Company
- (2) Organizational development and business development
- (3) Profiles of directors and executives
- (4) Qualifications and remunerations of directors
- (5) Roles, duties and responsibilities of directors
- (6) Management structure
- (7) Company's profile
- (8) Corporate governance policy

Training Programs for Board of Directors :

The Company has encouraged its directors to attend training courses and programs which are related to corporate governance principles, regulatory compliance, and governance roles and responsibilities of directors. The training courses and programs attended by the Company's directors are as shown below:

Name	Director Certification Program (DCP)	Director Accreditation Program (DAP)	Audit Committee Program (ACP)	Finance for Non - Finance Director (FND)	Monitoring Fraud Risk Management (MFM)	Understanding the Fundamental of Financial Statements (UFS)	Board Matters and Trends (BMT)
Mr.Pricha Attavipach	DCP39/2004		ACP11/2006	FND8/2004			
Mr.Sirivuthi Siamphakdee		DAP 54/2006					
Mr.Parphan Siriviriyakul		DAP 96/2012					
Mr.Nathapun Siriviriyakul		DAP55/2006					

Name	Director Certification Program (DCP)	Director Accreditation Program (DAP)	Audit Committee Program (ACP)	Finance for Non - Finance Director (FND)	Monitoring Fraud Risk Management (MFM)	Understanding the Fundamental of Financial Statements (UFS)	Board Matters and Trends (BMT)
Mrs.Darat Vibhatakalasa		DAP 96/2012					
Mr.Prasert Siriviriyakul		DAP 96/2012					
Mr.Apichart Noochprayoon		DAP 96/2012					
Mr.Sathaporn Kotheeranurak		DAP 35/2009	ACP13/2013				BMT6/2018
Acting Sub Lt. T-rayooth Changpetch		DAP 97/2012	ACP41/2012		MFM 8/2012		
Mr.Issakan Krivitthaya		DAP 97/2012	ACP41/2012		MFM 8/2012		
Mr.Phoonsak Boonsalee		DAP 97/2012					
Mr.Krairit Nilkuha		DAP53/2006	ACP24/2008			UFS 6/2006	
Mr.Kunihiko Tahara		DAP137/2017					

Summary of changes in KTIS 's shareholding by Directors as of September 30, 2019 :

Shareholding below represents the aggregate number of shares held by spouse ,minor child and people under Section 258 of the SEC Act.B.E 2535

Name	Position	Shares held on	During 2019 Number of Shares (Shares)	Shares held on	Total Percentage of Voting Shares(%)	Remark
		Sep 30,2018	Increase / decrease	Sep 30,2019		
1. Mr.Pricha Attavipach	Chairman	6,024,100	-	6,024,100	0.155	
2. Mr.Sirivuthi Siamphakdee	Vice-Chairman	-	-	-	-	None
3. Mr.Parphan Siriviriyakul	Director	3,100	-	3,100	0.000	
4. Mr.Nathapun Siriviriyakul	Director	27,216,000	-	27,216,000	0.705	
*Spouse and Minor Children		10,000	-	10,000	0.000	
5. Mrs.Darat Vibhatakalasa	Director	12,349,900	-	12,349,900	0.320	
6. Mr.Prasert Siriviriyakul	Director	5,902,000	15,500	5,937,500	0.153	
*Spouse and Minor Children		5,832,000	-	5,832,000	0.150	
7. Mr.Phoonsak Boonsalee	Independent Director	-	-	-	-	None
8. Mr.Apichart Noochprayoon	Director	500	-	500	0.000	
9. Mr.Kunihiko Tahara	Director	-	-	-	-	None
10. Ms.Chua Eng Eng	Director	21,544,000	-	21,544,000	0.558	

Name	Position	Shares held on	During 2019 Number of Shares (Shares)	Shares held on	Total Percentage of Voting Shares(%)	Remark
		Sep 30,2018	Increase / decrease	Sep 30,2019		
11. Mr.Krairit Nilkuha	Independent Director/ Chairman of Audit Committee	-	-	-	-	
*Spouse and Minor Children		20,000	15,000	5,000	0.001	
12. Mr.Sathaporn Kotheeranurak	Independent Director/ Chairman of Audit Committee	-	-	-	-	None
13. Acting Sub Lt. T-rayooth Changpetch	Independent Director/ Chairman of Audit Committee	-	-	-	-	None
14. Mr.Issakan Krivithaya	Independent Director	-	-	-	-	None
15. Mr.Sirapak Siriviriyakul	Director	190,698,000	-	190,698,000	4.940	

Committees

The Board of Directors appointed 4 sub-committees to control the Company's businesses as follows:

1.Audit Committee

As at September 30, 2019, Audit Committee consists of the following members:

Name	Position
1. Mr.Krairit Nilkuha	Chairman/Independent Director
2. Mr.Sathaporn Kotheeranurak	Member/Independent Director
3. Acting Sub Lt. T-rayooth Changpetch	Member/Independent Director

Mrs. Natthira Paisayom is the secretary of the Audit Committee.

Remark: Audit Committee no. 1-2 have sufficient knowledge and experience to verify the reliability of financial statement. The detail of experiences in verifying financial statement is according to the detail of each director (Attachment 1)

Membership Term :

The term of Directorship of the chairman and members of the Audit Committee is three years from the date of their appointment. Any retiring member of the Audit Committee may be re-elected. Where a Director's office in the Audit Committee is vacated by reason other than retirement, the Board shall elect a sufficiently qualified candidate to ensure that the requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time as the vacating Director was entitled to remain in office.

Scope of power and duties and responsibility of the Audit Committee :

- The Audit Committee shall ensure that our financial statements are complete and accurate;
- The Audit Committee shall ensure that we have implemented appropriate and efficient internal controls and audit systems, and that the Internal Audit Bureau is independent. It shall also be responsible for the approval of the appointment, transfer or termination of the Chief of the Internal Audit Bureau, or any other unit responsible for internal audit;
- The Audit Committee shall ensure that we comply with securities and exchange laws, regulations of the SET and laws relating to our business operations;
- The Audit Committee shall recruit and nominate an independent third-party as our auditor, determine the auditor's fees and hold at least one meeting per year with the auditor, without the participation of the management;
- The Audit Committee shall ensure that our connected transactions, or transactions that may result in conflicts of interest, are conducted in compliance with the law and rules of the SET, and shall ensure that such transactions are reasonable and in our best interests;
- The Audit Committee shall prepare an Audit Committee's report which will be disclosed in our annual report. The report must be signed by the chairman of the Audit Committee and shall contain the following details:
 - an opinion on the accuracy, completeness and reliability of our financial statements;
 - an opinion on the sufficiency of our audit control system;
 - an opinion on compliance with securities and exchange laws, regulations of the SET and the laws relating to our business;
 - an opinion on the suitability of the auditor;
 - an opinion on transactions which may result in conflicts of interest;
 - number of meetings held by the Audit Committee and the attendance record of each member of the Audit Committee;
 - comments or overall remarks obtained by the Audit Committee in relation to its performance under the Audit Committee Charter; and
 - other matters of which our shareholders and general investors should be informed;
- if the Audit Committee, in the course of their duties, finds or is suspicious of one of the following transactions or actions which has significantly affected our financial standing and operating results, the Audit Committee shall report such transaction or action to the Board such that the relevant rectifications can be made:
 - a transaction resulting in a conflict of interest;
 - fraud or any major irregularity or defect in our internal control system; or
 - a violation of securities and exchange laws, regulations of the SET and the laws relating to our business.

If the Board or Management fails to rectify the problem within the time specified, any member of the Audit Committee may make a report to the SEC or the SET; and

- The Audit Committee shall perform any other activities as designated by the Board with the Audit Committee's approval.

Number of Meeting Attended :

The table below shows the attendance of the Audit Committee in 2019.

Name	2019
1. Mr.Krairit Nilkuha	5/5
2. Mr.Sathaporn Kotheeranurak	5/5
3. Acting Sub Lt. T-rayooth Changpetch	5/5

2.Nomination and Remuneration Committee

As at September 30, 2019, Nomination and Remuneration Committee consists of the following members:

Name	Position
1. Mr.Issakan Krivitthaya	Chairman
2. Mrs.Darat Vibhatakalasa	Member
3. Mr.Phoonsak Boonsalee	Member

Mr.Poomrerk Wangpreedalertkul is the secretary of Nomination and Remuneration Committee .

Membership Term :

The term of membership of the chairman and members of the Nomination and Remuneration Committee is three years from the date of their appointment. Any retiring member of the Nomination and Remuneration Committee may be re-elected. In the event that a Director's office is vacated due to reasons other than retirement, the Board shall elect a sufficiently qualified candidate such that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power and duties of the Nomination and Remuneration Committee :

- The Nomination and Remuneration Committee shall review our business organization and the qualifications of our Directors and Chief Executive Officer in accordance with our business requirements;
- The Nomination and Remuneration Committee shall nominate only persons whose qualifications are appropriate for holding office as Directors and our Chief Executive Officer, and shall set up transparent nomination criteria and procedures for such persons. The nominations shall be presented at a Board meeting and/or a shareholders' meeting for approval;
- The Nomination and Remuneration Committee shall implement procedures and rules to ensure that fair and reasonable remuneration, both in cash and in kind, will be granted to our Directors and the Chief Executive Officer. The Nomination and Remuneration Committee shall propose such remuneration at a Board meeting and/or a shareholders' meeting for approval;
- The Nomination and Remuneration Committee shall report to the Board on its performance and shall prepare a Nomination and Remuneration Committee's report which will be disclosed in our annual report. The report must be signed by the chairman of the Nomination and Remuneration Committee;

- The Nomination and Remuneration Committee shall conduct performance evaluations and prepare an evaluation report for the Board; and
- The Nomination and Remuneration Committee shall perform any other activities as designated by the Board.

Number of Meeting Attended :

The table below shows the attendance of the Nomination and Remuneration Committee in 2019.

Name	2019
1. Mr.Issakan Krivitthaya	1/1
2. Mrs.Darat Vibhatakalasa	1/1
3. Mr.Phoonsak Boonsalee	1/1

3.Risk Management Committee

As at September 30, 2019, Risk Management Committee consists of the following members:

Name	Position
1. Acting Sub Lt. T-rayooth Changpetch	Chairman
2. Mr.Parphan Siriviriyakul	Member
3. Mr.Sirivuthi Siamphakdee	Member
4. Mr.Prasert Siriviriyakul	Member
5. Mr.Nathapun Siriviriyakul	Member
6. Mr.Issakan Krivitthaya	Member

Mrs.Jariya Srisakda is the secretary of the Risk Management Committee.

Membership Term :

The term of membership of the chairman and members of the Risk Management Committee is three years from the date of their appointment. Any retiring member of the Risk Management Committee may be re-elected. In the event that a Director's office is vacated due to reasons other than retirement, the Board shall elect a sufficiently qualified candidate such that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power and duties of the Risk Management Committee :

- Before making management policy proposals to the Board for approval, the Risk Management Committee shall consider our risk management policies in light of changes in our business and circumstances;
- The Risk Management Committee shall determine business strategies in accordance with our riskmanagement policies;
- The Risk Management Committee shall approve risk management indicators;

- The Risk Management Committee shall monitor management's compliance with our risk management policies and control the efficiency of risk management;
- The Risk Management Committee shall monitor the sufficiency of resources such as staff and systems for risk management;
- The Risk Management Committee shall implement risk management procedures and rules for evaluating significant transactions before such transactions are presented to the Board and relevant committees for approval;
- The Risk Management Committee shall monitor and report our risk status to the Board and the Audit Committee ;
- The Risk Management Committee shall integrate corporate governance, risk management and legal compliance in order to achieve integrity-driven operations;
- The Risk Management Committee shall set up a working team as may be appropriate; And
- The Risk Management Committee shall perform any other activities as designated by the Board.

Number of Meeting Attended :

The table below shows the attendance of the Risk Management Committee in 2019.

Name	2019
1. Acting Sub Lt. T-rayooth Changpetch	4/4
2. Mr.Parphan Siriviriyakul	4/4
3. Mr.Sirivuthi Siamphakdee	4/4
4. Mr.Prasert Siriviriyakul	4/4
5. Mr.Nathapun Siriviriyakul	4/4
6. Mr.Issakan Krivitthaya	4/4

4.Executive Committee

As at September 30, 2019, Executive Committee consists of the following members:

Name	Position
1. Mr.Sirivuthi Siamphakdee	Chairman
2. Mr.Parphan Siriviriyakul	Member
3. Mrs.Darat Vibhatakalasa	Member
4. Mr.Prasert Siriviriyakul	Member
5. Mr.Nathapun Siriviriyakul	Member

Mr.Poomrerkr Wangpreedalertkul is the secretary of the Executive Committee.

Membership Term :

The term of membership of the chairman and members of the Executive Committee is three years from the date of their appointment. Any retiring member of the Executive Committee may be re-elected. In the event that there is a vacancy in a Director's office for reasons other than retirement, the Board shall elect a sufficiently qualified candidate as a member to ensure that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power and duties of the Executive Committee :

- The Executive Committee is responsible for managing our business in accordance with the objectives of our business operations, provided that management of our business shall be subject to policies, rules or orders prescribed by the Board. In addition, the Executive Committee is responsible for reviewing matters to be proposed to the Board for further approval;
- The Executive Committee shall prepare our vision, business strategies and direction, business policies, targets, guidelines, operational plans and our annual budget, and shall present the same to the Board for approval;
- The Executive Committee shall set up business policies and management authorization, shall approve our annual budget and comply with the business plan and strategy according to the policies and business model presented to the Board;
- The Executive Committee shall efficiently oversee and monitor our operations in accordance with our management policies and guidelines as approved by the Board;
- The Executive Committee shall approve matters or actions to be taken in the ordinary course of our business, so long as it is within the Board's approved budget, does not involve the incurring of liabilities or encumbrances exceeding Baht 1,000 million, and does not have a term of over five years (liabilities or encumbrances include project finance facilities granted to us);
- The Executive Committee shall have the power and authority to approve borrowing or lending transaction, including credit transactions with banks and companies in KTIS group, or obligations as a guarantor of affiliates, or payments and expenses required for the Company's operations in normal course of business.
- The Executive Committee shall have the power and authority to appoint the Company's employees at the level below Group CEO
- The Executive Committee shall make the following reports on our results of operations:
 - a quarterly report of our performance shall be submitted within the timeframe prescribed by the SET;
 - an auditor's report in respect of our financial statements, including our annual and quarterly financial statements, shall be submitted within the timeframe prescribed by the SET; and
 - other reports deemed appropriate by the Executive Committee;
- The Executive Committee shall perform any other activities as designated by the Board;

Nevertheless, the Executive Committee shall not have the power to approve any transactions in which members of the Executive Committee or any other person may have a conflict of interest (as defined in the notification of the SEC) with the Company. In such event, the Executive Committee must present the transaction to the Board and/or the shareholders for approval in accordance with the relevant articles, notifications and laws.

Number of Meeting Attended

The table below shows the attendance of the Executive Committee in 2019.

Name	2019
1. Mr.Sirivuthi Siamphakdee	9/9
2. Mr.Parphan Siriviriyakul	9/9
3. Mrs.Darat Vibhatakalasa	6/9
4. Mr.Prasert Siriviriyakul	8/9
5. Mr.Nathapun Siriviriyakul	8/9

Evaluation of Committee :

To comply with the corporate governance principle, the Board has undertaken the performance evaluation of the Audit Committee at least annually by using the evaluation form developed by the Stock Exchange of Thailand (SET). Based on the 2019 evaluation, the overall rating under each category is as follows:

Evaluation Category	Performance of Audit Committee	Nomination and Remuneration Committee	Risk Management Committee	Executive Committee
1. Board structure and qualifications of directors	5.00	4.81	4.38	4.22
2. Board meeting	4.94	4.83	4.31	4.27
3. Roles, duties and responsibilities of Board	5.00	4.61	4.43	4.23
Average	4.98	4.75	4.37	4.23

Remark: Total score = 5

Executives

As at September 30, 2019, Executives, as defined in the Notification of the Securities and Exchange Commission No. KorChor. 17/2551 Re: Definition under Notifications relating to Issuance and Offering of Securities, consists of the following members:

Remarks: An executive means a Director, a manager or the next four executives succeeding the manager, a person holding an equivalent position to the fourth executive, including a person holding the position of manager or the equivalent in the accounting or finance departments.

Name	Position
1. Mr.Parphan Siriviriyakul	Chief Executive Officer - KTIS Group
2. Mr.Sirivuthi Siamphakdee	Chief Financial Officer - KTIS Group
3. Mrs.Darat Vibhatakalasa	Deputy Chief Executive Officer - KTIS Group
4. Mr.Prasert Siriviriyakul	Deputy Chief Executive Officer - KTIS Group
5. Mr.Nathapun Siriviriyakul	Deputy Chief Executive Officer - KTIS Group
6. Mrs.Nomchit Akaramekin	Director - Accounting Department

Membership Term :

The term of membership of the chairman and members of the Executive Committee is three years from the date of their appointment. Any retiring member of the Executive Committee may be re-elected. In the event that there is a vacancy in a Director's office for reasons other than retirement, the Board shall elect a sufficiently qualified candidate as a member to ensure that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office

Scope of power and duties of the Chief Executive Officer – KTIS Group :

- The Chief Executive Officer – KTIS Group shall be responsible, overall, for our operations in accordance with our business objectives and the rules prescribed by the Board;
- The Chief Executive Officer – KTIS Group shall implement and comply with the business strategies and directions approved by the Board;
- The Chief Executive Officer – KTIS Group shall perform any activity designated by the Board and shall comply with policies prescribed by the Board;
- The Chief Executive Officer – KTIS Group shall introduce regulations, notifications and memorandums in accordance with our policies;
- The Chief Executive Officer – KTIS Group shall approve transactions taken in the ordinary course of our business, including transactions which do not bind any of our assets, and transactions which the Board has authorized the Chief Executive Officer – KTIS Group to approve;
- The Chief Executive Officer – KTIS Group shall monitor management and officers to ensure that they are in compliance with our internal policies and business directions prescribed by the Board;
- The Chief Executive Officer – KTIS Group shall review transactions affecting our rights and assets before referring proposals of such transactions to the Executive Committee or the Board for approval;
- The Chief Executive Officer – KTIS Group shall monitor all expenses relating to our ordinary business operations and ensure that they are in accordance with the Board's approved budget;
- The Chief Executive Officer – KTIS Group shall approve all investments in instruments and securities as approved by the Board;
- The Chief Executive Officer – KTIS Group shall approve investments in business expansion and co-investment with other operators and submit proposals of such matters to the Board for approval;
- The Chief Executive Officer – KTIS Group shall approve investment funds as prescribed in our annual budget or as approved by the Board;
- The Chief Executive Officer – KTIS Group shall monitor our employees and ensure that they are in compliance with our internal policies and regulations, including our corporate governance regulations;
- The Chief Executive Officer – KTIS Group shall take measures to enhance our employees' performance in order to improve our business performance;
- The Chief Executive Officer – KTIS Group shall appoint relevant advisors necessary for our business operations;

- Pursuant to the policies prescribed by the Board, the Chief Executive Officer – KTIS Group shall approve related party transactions conducted on an arm's length basis. Such transactions may involve trading at market prices, servicing with ordinary fees and the provision of credit on similar terms;
- The Chief Executive Officer – KTIS Group shall approve the appointment, transfer and termination of employees, and may also delegate any of his duties to such other persons as he deems fit; and
- The Chief Executive Officer – KTIS Group shall perform other activities as designated by the Board;

The Chief Executive Officer – KTIS Group shall not approve the following transactions:

- a related party transaction that is not in the ordinary course of our business;
- an acquisition or disposal of our material assets; and a transaction in which the Chief Executive Officer – KTIS Group, or any other person may have a conflict of interests with KTIS Group, except where the transaction is in the ordinary course of our business, is prescribed by our Board and shareholder approved policies and provisions, and is in compliance with the relevant SEC regulations.

Evaluation of Chief Executive Officer – KTIS Group:

To comply with the corporate governance principle, the Board has undertaken the performance evaluation of the Chief Executive Officer – KTIS Group at least annually by using the evaluation form developed by the Stock Exchange of Thailand (SET). Based on the 2019 evaluation, the overall rating under each category is as follows:

Evaluation	CEO Group
1. Leadership	4.78
2. Strategy formulation	4.69
3. Strategy execution	4.73
4. Financial planning and performance	4.78
5. Relationship with Board of Directors	4.89
6. Relationship with external parties	4.84
7. Administration and employee relations	4.04
8. Product and service knowledge	4.81
Average	4.79

Remark: Total score = 5

Company Secretary

In compliance with Article 89/1 and Article 89/2 of the SEC Act (No.4) of 2008, Board of Directors Meeting No.3/2019 of March 25, 2019, appointed Mr.Poomrerk Wangpreedalertkul as Company Secretary. The Company Secretary performs his duties under the laws in preparing and maintaining key corporate documents, namely the director registra, meeting notices, Board of Directors minutes of meeting, shareholders' minutes of meeting, Annual Report and Reports of Related Parties Transaction of Directors and Executives. He also takes action concerning the Board of Directors and shareholder's meetings. The Company Secretary attends key training courses helpful to his complete range of duties.

Nomination of Directors and Executives

The Nomination and Remuneration Committee shall be responsible for recruiting, selecting and nominating persons with the appropriate qualifications to be presented to the Board and/or the shareholders for approval. Such persons shall have the qualifications prescribed under Section 68 of the Public Limited Company Act B.E. 2535 (1992) (as amended) and must not be of character prohibited under the notification of the SEC No. ThorChor. 24/2551 re: Prerequisites of Directors and Executives of Securities Issuer Companies (as amended). In appointing Directors and Executives, the candidate's knowledge, ability and work experience will also be taken into account.

The composition and appointment of the Board, Audit Committee, Corporate Governance Committee, Executive Committee, Nomination and Remuneration Committee and Risk Management Committee can be summarized as follows:

Composition and appointment of the Board :

The Board shall consist of no less than five Directors. At least half of the Directors must be domiciled in Thailand. The Directors may or may not be shareholders.

In appointing Directors, the Nomination and Remuneration Committee shall be responsible for recruiting and selecting persons with the requisite knowledge, ability and experience related to our business. The appointment of new Directors shall be approved at a Board meeting and/or a shareholders' meeting. Pursuant to our Articles of Association, the election of Directors at a shareholders' meeting shall be in accordance with the following rules and procedures:

- each shareholder shall have one vote per share;
- each shareholder shall use all of his votes to elect one or several persons as a Director or Directors. However, he may not divide his votes among multiple candidates; and
- the persons who receive the most votes will be elected as Directors. The Chairman shall have a casting vote in the event that the election of two candidates who have equal votes will cause the number of Directors to be elected to exceed that prescribed in the meeting.

Any Director who desires to resign from office is required to submit a resignation letter. The resignation will be effective from the date the resignation letter is received.

Shareholders may, by passing a resolution by a majority consisting of three quarters or more of the total number of votes cast for and against such resolution at a shareholders' meeting, remove any Director from office prior to his retirement.

Composition and Appointment of the Audit Committee

The Audit Committee shall consist of at least three independent directors. At least one independent director of the Audit Committee must have sufficient knowledge and experience in accounting or finance to perform audits of our financial statements. Under the relevant Capital Market Supervisory Board's notifications, the Audit Committee/independent director:

- including related persons of such independent director, shall not hold shares exceeding one per cent of the total number of shares in KTIS, our parent company, subsidiaries, associates, major shareholders or controlling persons;
- must not:
 - have participated in management;
 - have been an employee, staff or advisor receiving a regular salary from us; and
 - have been a controlling person of KTIS, our parent company, subsidiaries, associates, subsidiary company in the same level, major shareholders or controlling persons;

unless the foregoing has ended not less than two years prior to the date of filing of an application with the Office of the Securities and Exchange Commission ("Office of the SEC") or if such independent director was a government official or government advisor of a unit which is our major shareholder or controlling person;

- must not be the father, mother, spouse, sibling or child (including his or her spouse) of a Director or an Executive (including prospective Executives), major shareholder or controlling person (including prospective controlling persons), whether such relationship is determined by blood relations or legal relations;
- must not:
 - have or used to have a business relationship¹ with KTIS, our parent company, subsidiaries, associates, major shareholders or our controlling persons, in a manner which may interfere with his independent judgment;
 - be or used to be an indirect significant shareholder or controlling person of any person having a business relationship with KTIS, our parent company, subsidiaries, associates, major shareholders or our controlling persons;

unless the foregoing relationship has ended not less than two years prior to the date of filing an application with the Office of the SEC.

- must not be or must not have been the auditor of KTIS, our parent company, subsidiaries, associates, major shareholders or our controlling persons, or a significant shareholder, controlling person or partner of an audit firm carrying out the audit of KTIS, our parent company, subsidiaries, associates, major shareholders or our controlling persons, unless the foregoing relationship has ended not less than two years prior to the date of filing an application with the Office of the SEC;
- must not:
 - be or have been a professional service provider, including legal or financial advisor receiving fees exceeding Baht 2 million per annum from KTIS, our parent company, subsidiaries, associates, major shareholders or our controlling persons;
 - be or have been a significant shareholder, controlling person or partner of such professional service provider;

unless the foregoing relationship has ended not less than two years prior to the date of filing an application with the Office of the SEC;

- must not be a director appointed to be a representative of Directors of KTIS, our major shareholder or shareholder who is a connected person of the major shareholder;
- must not undertake any business which is in competition with us;
- must not be
 - a significant partner in a partnership;
 - a Director participating in management;
 - an employee; or
 - an advisor;
receiving a regular salary from or holding shares in a proportion exceeding 1% of the total number of shares of another company which is in competition with us;

¹ Such business relationships include commercial transactions made in the ordinary course of business, renting or leasing of property, transactions in relation to assets or services, granting or receipt of financial support by receiving or giving loans, guarantees, providing assets as collateral and any other similar actions, which may result in us or a counterparty being subject to indebtedness amounting to an equivalent of 3% or more of our net tangible assets or Baht 20 million or more, whichever is lower. The amount of such indebtedness shall be calculated according to the method of calculating the value of connected transactions specified in the notification of the Capital Market Supervisory Board governing rules on connected transactions. Such indebtedness shall include indebtedness incurred one year prior to the date in which the business relationship commences.

- must not have any other characteristics which may prevent him from expressing an independent opinion on our operations;
- must not being a Director assigned by the Board to make decisions on business operations of KTIS, our subsidiaries, associates, subsidiary company in the same level, major shareholders or our controlling persons; and
- must not being a director of listed subsidiaries.

Composition and Appointment of the Executive Committee :

The Board selects Members of the Executive Committee from our Directors or key Executives. The Executive Committee shall report directly to the Board.

Composition and Appointment of the Nomination and Remuneration Committee :

The members of the Nomination and Remuneration Committee are selected and appointed by the Board. At least one third of all the members of the Nomination and Remuneration Committee shall be independent directors.

The Nomination and Remuneration Committee shall report directly to the Board.

Composition and Appointment of the Risk Management Committee :

The members of the Risk Management Committee are selected and appointed by the Board. At least two members of the Risk Management Committee shall be independent directors. The chairman should be an independent director.

The Risk Management Committee reports directly to the Board.

Remuneration of the Board and Executives

1. Remuneration of the Board

Directors' remuneration are categorized into monthly remuneration and meeting allowance per meeting. Our shareholders determined the remuneration of Directors at the AGM Meeting held on January 25, 2019 to be as follows:

Committee		Remuneration per month	Attendance Fee per meeting
Board of Director	Chairman of the Board of Directors	50,000	50,000
	Director	25,000	25,000
Audit Committee	Chairman	-	60,000
	Member	-	30,000
Risk Management Committee	Chairman	-	40,000
	Member	-	20,000
Nomination and Remuneration Committee	Chairman	-	40,000
	Member	-	20,000

Remark: There are not any other benefit.

The below table shows the remuneration details of our Directors for the year 2018 and 2019.

Name of Director	Position 2019	2018						2019					
		Remuneration	BOD	Audit Committee	Nomination and Remuneration	Risk management	Total (baht)	Remuneration	BOD	Audit Committee	Nomination and Remuneration	Risk management	Total (baht)
1. Mr.Pricha Attavipach	Chairman	450,000	200,000	-	-	-	650,000	600,000	300,000	-	-	-	900,000
2. Mr.Sirivuthi Siamphakdee	Vice-Chairman	225,000	100,000	-	-	60,000	385,000	300,000	150,000	-	-	80,000	530,000
3. Mr.Parphan Siriviriyakul	Director	225,000	100,000	-	-	60,000	385,000	300,000	150,000	-	-	80,000	530,000
4. Mr.Nathapun Siriviriyakul	Director	225,000	100,000	-	-	60,000	385,000	300,000	150,000	-	-	80,000	530,000
5. Mrs.Darat Vibhatakalasa	Director	225,000	100,000	-	20,000	-	345,000	300,000	150,000	-	20,000	-	470,000
6. Mr.Prasert Siriviriyakul	Director	225,000	100,000	-	-	60,000	385,000	300,000	150,000	-	-	80,000	530,000
7. Mr.Sirapak Siriviriyakul	Director	225,000	100,000	-	-	-	325,000	300,000	150,000	-	-	-	450,000
8. Mr.Apichart Noochprayoon	Director	225,000	100,000	-	-	-	325,000	300,000	150,000	-	-	-	450,000
9. Ms.Chua Eng Eng	Director	225,000	100,000	-	-	-	325,000	300,000	50,000	-	-	-	350,000
10. Mr.Sathapom Kotheeranurak	Independent Director	225,000	100,000	120,000	-	-	445,000	300,000	150,000	120,000	-	-	570,000
11. ActingSub Lt. T-rayooth Changpetch	Independent Director	225,000	100,000	120,000	-	120,000	565,000	300,000	150,000	120,000	-	160,000	730,000
12. Mr.Issakan Krivithaya	Independent Director	225,000	100,000	-	40,000	60,000	425,000	300,000	150,000	-	40,000	80,000	570,000
13. Mr.Phoonsak Boonsalee	Independent Director	225,000	100,000	-	-	-	325,000	300,000	125,000	-	20,000	-	445,000
14. Mr.Krairt Nilkuha	Independent Director	225,000	100,000	240,000	20,000	-	585,000	300,000	150,000	240,000	-	-	690,000
15. Mr.Kunihiko Tahara	Director	225,000	100,000	-	-	-	325,000	300,000	150,000	-	-	-	450,000
Total		3,600,000	1,600,000	480,000	80,000	420,000	6,180,000	4,800,000	2,275,000	480,000	80,000	560,000	8,195,000

2. Remuneration of the Executives

The table below represents the remuneration details of our Executives in 2017, 2018 and 2019.

Type of Remuneration	Number (persons)	2017 (Baht)	2018 (Baht)	2019 (Baht)
Salary	6	29,420,208.00	22,521,141.00	30,125,412
Bonus	6	4,920,143.00	2,498,298.00	2,915,514
Total		34,340,351.00	25,019,439.00	33,040,926

Remark: 6 executives are (1) Chief Executive Officer - KTIS Group (Group CEO) (2) Chief Financial Officer - KTIS Group (3-5) Deputy Chief Executive Officer - KTIS (6) Director - Accounting Department

3. Other Remuneration

- **Provident fund amount**

The following table displays the details of the provident fund amount in 2017, 2018 and 2019.

Type of Remuneration	Number (persons)	2017(Baht)	2018 (Baht)	2019 (Baht)
Provident fund	6	653,143.53	501,809.67	672,968.52
Total		653,143.53	501,809.67	672,968.52

Remark: 6 executives are (1) Chief Executive Officer - KTIS Group (Group CEO) (2) Chief Financial Officer - KTIS Group (3-5) Deputy Chief Executive Officer - KTIS (6) Director - Accounting Department

- **Project for proposing the warrants for the executives and staff to purchase ordinary shares (Employee Stock Options Project)**

At the 1/2013 Extraordinary General Meeting of Shareholders held on January 28, 2013, the Meeting resolved to allocate the newly issued ordinary shares of the Company in the amount of not more than 28,000,000 shares to accommodate the exercise of warrants and offer such ordinary shares for sale to the executives and staff of the Company and its subsidiaries, according to the rules and methods for the allocation (Details according to Clause 7.4: Issuance of other securities). In this regard, such warrants to purchase ordinary shares are subject to the exercise ratio of 1 unit having the right to purchase 1 ordinary share (except for the subsequent rights adjustment in which the staff's rights shall not be less favorable than the existing rights) and the exercise price to purchase the shares shall be equal to the price of the initial public offering (10.00 Baht per share).

The directors and executives of the Company are entitled to the proportion of allocation of the warrants as at September 30, 2019 as follows:

List of the Directors and Executives Entitled to the Allocation	Calculated as (%)
MR.PARPHAN SIRIVIRIYAKUL	0.40%
MR.PRASERT SIRIVIRIYAKUL	0.30%
MR.NATHAPAN SIRIVIRIYAKUL	0.30%
MR.SIRIVUTHI SIAMPHAKDEE	0.19%
MRS.DARAT VIBHATAKALASA	0.36%
MR.APICHAART NOOCHPRAYOON	0.26%
MRS.NOMCHIT AKARAMEKIN	0.23%

Remark: The calculation is made in % proportion to the number of shares being allocated, the exercise price and the number of all allocated ordinary shares of the warrants to purchase ordinary shares of the Company issued and offered for sale to the executives and staff of the Company (KTIS-WA) in the amount of not over 28,000,000 shares.

Personnel and Remuneration

The Company has a total of **3,437** employees and the remuneration expenses in 2019 amounted to Baht **1,083,894,883.64** which included expenses such as salary, overtime expenses, allowance, special bonus, special financial assistance, contribution to the Social Security Fund and contribution to the provident fund.

Company	2019				
	Service No. of Employee	Management No. of Employee	Head Office No. of Employee	Total	Total 2018 Personnel Expenses
Sugarcane and Sugar Business	2,585	83	126	2,794	877,127,929.79
Bio Business	583	22	38	643	206,766,954.85
Total	3,168	105	164	3,437	1,083,894,883.64

Note The information was only permanent employees of KTIS Group and did not include seasonal hiring employees and advisers.

None of the Company's employees is a union member. The Company believes that our employer- employee relationship is healthy and strong.

People Development Policy

Human Resource Development.

The company understands and values the human resource development as a key to improving its performance. HRD program is designed to help the company to increase its enabling capabilities to increase productivity, to produce and deliver quality products and satisfy its customers, as well as to create a learning culture for the improvement of its organization, safely work, and corporate social responsibility and eco-friendly concerned.

The company aims to develop "quality and valued employees, committed to organizational culture and core values", as follows:

Organizational culture

1. Diligence
2. Innovation
3. Familiness
4. Corporate Governance
5. Knowledge Empowerment and Self Development
6. Sugarcane Farmer Support and Care
7. Corporate Social Responsibility

Core value

1. Knowledge and development :

The company emphasizes on continuous learning and development to elevate employees' knowledge and capability in order to adapt to changes and trend disruption, to increase their productivity and efficiency with safety consciousness, as well as to boost their creativity and be better able to think of innovative solutions for sustainable growth of the organization.

2. Teamwork spirit :

The company encourages its employees to develop systematic approaches, understand their roles and responsibilities, open-minded, reasonable, and respect each other, as well as be involved, dare to think, speak and make brave decisions, for workplace productivity and efficiency.

3. Intelligent and good people :

The company encourages its employees to enhance 7 quotients, namely IQ (Intelligence Quotient), EQ (Emotional Quotient), CQ (Creativity Quotient), MQ (Moral Quotient), PQ (Play Quotient), AQ (Adversity Quotient) and SQ (Social Quotient), which will highlight KTIS core value that “We are capable of thinking, getting things done, and learning as well as be a good person”.

4. Smart Goal and service mind :

S = Specific

M = Measurable

A = Attainable

R = Relevant

T = Timely

The company supports its employees to unlock their ambition, determination, and never give up attitude in overcoming challenges for work success. Moreover, the employees are encouraged to be highly reliable, responsible, service-minded and customer-orientated with positive human relationships to satisfy all stakeholders ranging from internal and external customers, cane farmers, suppliers and shareholders.

Human Resource Development

KTIS has guidelines in Human Resource Development as follows:

1. Workforce Recruitment

- 1.1. Academic scholarships are awarded to children and youth including those of KTIS's employees and its contracted cane farmers'. Qualified scholars will be eligible for joining with KTIS after graduations.
- 1.2. Cooperative education programs are available for student interns and those qualified students will be eligible for joining with KTIS after graduations.
- 1.3. With cooperation with national academic institutions, technical trainings and internship programs in a bilateral system are provided to vocational student interns, which is to combine theory and practice to gain work experiences through their internship at the site of production, by which to solve the technical skilled labor shortage and provide the right skills needed to match industries' demands.

2. Training and development programs aim to enhance employees' skills and knowledge, which provided to all levels of employees, ranging from officer to management, and covers such topics as technical, general knowledge, management and leadership.

The programs include technical scholarships, on-the-job trainings, knowledge and experience sharing within teams, to makes valuable human resources aligning with the organizational culture and core value.

3. Innovation and work process improvement are encouraged to increase competitiveness, productivity, efficiency and safety in the workplace. The company therefore sets up innovative projects or work improvement plan, in which received greater involvement from employees.

The company comply with the human resource development guidelines constantly and continuously, therefore has been awarded “outstanding business establishment in the promotion of skill development” from Department of skill development for 7 consecutive years.

In 2019, the company received “Skill Development Fund” from the Department of Skill Development as its training and development performance is above that of the law imposed, the company thereafter will utilize such fund to further its skill development programs.

Summary of training and development courses in 2019 are as follows:

Note: Training and development courses during October 2018-September 2019

No.	Date	Course	Total
1	1-2, 8-9, 17-18 Oct 18	Life Rebalance, Work enhancement class 1-3, each class was 40 people	117
2	1-2 Oct 18	Welding technique	13
3	12 Oct 18	New 4.0 Technology for Sugar Industry	3
4	1-2 Oct 18	Welding technique	10
5	10-12 Oct 18	Benchmarks, procedures for boiler inspection Energy efficiency	2
6	12 Oct 18	NEW 4.0 TECHNOLOGY FOR SUGAR INDUSTRY	3
7	16 Oct 18	Seminar of public hearing for the study to solve the limitations of sugarcane truck weight.	3
8	17 Oct 18	National Halal license holders of 2018	5
9	19 Oct 18	The meeting for the Inter-trip system and Tele protection system establishment at Nakhon Sawan Electricity Station	2
10	6-7 Oct 18	Personality Development and Capacity Building for Personnel Advancement, Generation 1	96
11	8-9 Oct 18	Personality Development and Capacity Building for Personnel Advancement, Generation 2	67
12	19-20 Oct 18	Enhancement of the competency of a supervisor and a successful organization successor	100
13	1-2 Oct 18	Welding technique	10
14	01 - 02 Oct 18	Welding technique	4
15	16 Oct 18	Gasket usage	20
16	27-30 Nov 18	Mandatory training for new employees of Year 2018/2019 Class 1-4, each class:student 100	400
17	30 Nov 18	Review the quality management system ISO 9001: 2015, HACCP, GMP, FSSC 22000, HALAL for employees operating at Plant LS.	69
18	5-6, 12-13, 19-20 Nov 18	Empowering the supervisor level of professional level 1-3 for each level of 60 people	196

No.	Date	Course	Total
19	6 Nov 18	Awareness for Transition ISO/IEC 17025:2017 with Major Modifications	2
20	16-17 Nov 18	Devaluation of sugar and water treatment system	12
21	1 Nov 18	Water and Air Pollution Current law and future trends of law	2
22	2 Nov 18	Laws and regulations of GMP and HACCP	2
23	7 Nov 18	Principle of value Pol sugar analysis	6
24	9 Nov 18	Increasing sugarcane knowledge and skills of supervisor level	76
25	12 Nov 18	Meeting on the calculation of low concentration syrup compared to raw sugar	1
26	16-17 Nov 18	Devaluation of sugar and water treatment system	2
27	23-24 Nov 18	Time management techniques and Planning for the efficiency of office staff, generation 1-2	107
28	24 Nov 18	Discipline and work regulations of 5S And Safety Health and Environmental	420
29	27 Nov 18	Basic fire fighting training and Fire drills And first aid	216
30	28 Nov 18	Development of work potential of Farm department	207
31	29 Nov 18	Ways to do work 2 (OJT ON THE JOB TRAINING)	480
32	29 Nov 18	Annual staff orientation 2018/2019	903
33	08 Nov 18	Ability enhancement, job development concepts 4 Build 4 Think >KPI+	91
34	12-18 Dec 18	Daily staff education Before working in the production season 2018/2019 And the company's quality standard system No.1-4	559
35	09 Dec 18	Migration techniques and Resolving emergency situations of Chemical spills	1
36	07 Dec 18	Steam Energy Saving Project and Condensate	12
37	15 Dec 18	Energy Conservation Promotion Activity Project	10
38	6 Dec 18	Mandatory training for new employees of 2018/2019 (Farm department)	100
39	13-14 Dec 18	Working at oil storage locations	1
40	14 Jan 19	Hazardous chemicals and the suppression of chemical spills	27
41	31 Jan 19	Expanding sugarcane cultivation	46
42	28 Jan 19	Training to solve problems of Microbial contamination in drinking water in sealed containers and strong water	2
43	29 Jan 19	Agricultural conference on sugarcane of Annual budget 2019	3
44	28,31 Jan 19	KAIZEN เพื่อการเพิ่มผลผลิตและการปรับปรุงงาน รุ่นที่1-2	101
45	18 Feb 19	Promote drug management systems in the workplace	3
46	25-28 Feb 19	Belt connection and conveyor maintenance	2
47	08 Feb 19	ZERO EFFLUENTS DISTILLERY	2

No.	Date	Course	Total
48	09–10 Feb 19	INDUSTRIAL PIPING SYSTEM	1
49	12 Feb 19	Procedures MANAGEMENT OF CHANGE And the environmental impact assessment	15
50	26 Mar 19	Reading and analysis techniques for Examination report Accounting and financial statements	11
51	26 Mar 19	Project to strengthen working discipline in the workplace	2
52	18 Apr 19	ANTIVIRUS ESET NOD ENDPOINT	1
53	22 Mar 19	Examination Officer Food and beverage production , Sugar Industry Program Occupation Technician Boiler Pot Technician Spin spin Drying Technician qualification 2, 3 ,4	3
54	8 Mar 19	System check CONTROL DRIVE	14
55	8 Mar 19	The system for submitting a report on the implementation of environmental protection and mitigation measures	2
56	14 Mar 19	Measures to encourage accountants	2
57	20 Mar 19	Professional electrical system design	1
58	26 Mar 19	Project to strengthen working discipline in the workplace	4
59	23-25 Apr 19	Trainer in the workplace (TRAIN THE TAINER)	3
60	25-26 Apr 19	Hazardous chemicals and safety in Working in confined spaces	12
61	19-24 Apr 19	Policy to boost sugarcane production Class 1-5, each class: 100 students	396
62	23-25 Apr 19	Trainer in the workplace (Quality system and dimension measuring technology)	6
63	29 Apr 19	Annual performance evaluation 2019	21
64	23-26 Apr 19	Trainer in the workplace (TRAIN THE TRAINER)	5
65	26 Apr 19	Measure to encourage business operators to create accounts in accordance with the true conditions of the business	2
66	30 Apr 19	Quality Performance Assessment Techniques	35
67	29 Apr 19	Understanding annual performance evaluations 2018/2019	5
68	23–25 Apr 19	Quality system and technology on dimensional measuring instruments (TRAIN THE TRAINER)	2
69	3 May 19	Implementation and programming of system simulation Operating “VMWARE”	1
70	25 May 19	Personnel management and Overcome hardship	30
71	16–18 May 19	PLC S7 -1500	1
72	25 May 19	The importance of Water Activity and Moisture Sorption Isotherm to food safety and extending shelf life	2
73	3 May 19	Making a plan to solve the outbreak of White sugar cane disease	5
74	7-8 May 19	Develop sugarcane breeding personnel and in the selection of sugarcane varieties	3

No.	Date	Course	Total
75	9 May 19	Increasing sugarcane knowledge and skills	96
76	13 May 19	Optimization of steam system efficiency for biomass power plants	1
77	13-17 May 19	Knowledge development of welding technology	25
78	18 May 19	Increasing production efficiency with preventative maintenance, 1st generation	85
79	22 May 19	Advances in Chromatography technology (HPLC/TLC) For the ability to separate substances with Higher efficiency	2
80	23 May 19	The use of hazardous substances Glyphosate and chlorpyrifos To be correct and safe	2
81	27-31 May 19	Basic knowledge in hydraulic systems	25
82	14 May 19	Innovation and technology to recycle waste energy	2
83	21 Jun 19	5S operation principles for development and work improvement	20
84	22 Jun 19	Principles of operation according to process analysis procedures (PROCESS IMPROVEMENT)	28
85	26-27 Jun 19	Knowledge of Bearings	10
86	21-22 Jun 19	Training to give knowledge about increasing efficiency and improving work process analysis	4
87	26-27 Jun 19	Knowledge of Bearings	2
88	12 Jun 19	Instrument calibration	15
89	24-26 Jun 19	Automobiles' air conditioner maintenance	25
90	25 Jun 19	Selection and maintenance methods for liquid analyzers pH	18
91	21 Jun 19	5 S. Principles of development and work improvement	61
92	13 Jun 19	Analytical technology And machine maintenance	12
93	17-21 Jun 19	Delta V Engineering	4
94	22 Jun 19	Principles of operation according to analytical procedures work process	59
95	26-27 Jun 19	Knowledge of Bearings (SKF)	15
96	5-6 Jun 19	Increasing production efficiency with preventative maintenance. Generation 2-3, (50 people/Gen)	95
97	7-8 Jun 19	Smart Farm "Make a man to be a Smart Farm"	5
98	11 Jun 19	The project also supports the improvement of energy management efficiency in the whole compressed air system. Automatic control system	1
99	12 Jun 19	5 S. Principles of development and work improvement ON THE JOB TRAINING (OJT)#4	56
100	12 Jun 19	Sustainable Development Leadership Seminar Bonsucro in the environment and respect for human rights	1
101	13 Jun 19	Machine analysis and maintenance technology	17
102	16 Jun 19	Methods of water quality control and correction (RPBP)	16

No.	Date	Course	Total
103	17-22 Jun 19	Person in charge of ordinary energy (factory)	1
104	19-20 Jun 19	Knowledge about optimization and improvement Analyze work process	74
105	24 Jun 19	Meeting to follow up on the improvement plan INTER-TRIP And system TELEPROTECTION To guarantee the parallel selling of electricity to the station	1
106	26-27 Jun 19	Knowledge of Bearings	15
107	26-28 Jun 19	Tax mapping and Property registration, Field surveys record property registrations for easy successful completion.	1
108	4,27 Jun 19	Streamline work processes to transform office operations. Generation 1-2	40
109	27 Jun 19	Lightning and Electromagnetic Impulse Protection and Concrete Foundation Grounding	1
110	10-14 Jun 19	Increasing work efficiency for increasing productivity Model 1-2	44
111	26-27 Jun 19	Knowledge of Bearings	17
112	13 Jun 19	Machine analysis and maintenance technology	6
113	21-22 Jun 19	Principles of operation according to analytical procedures And work process (PROCESS IMPROVEMENT)	46
114	17-21 Jun 19	Air Pollution Control System Controller	1
115	26-27 Jun 19	Knowledge of Bearings	3
116	8 Jul 19	The factory is a safe working home. 100%	11
117	15 Jul 19	Prevent before the accident	33
118	18-19 Jul 19	Hazardous chemicals and chemical safety	22
119	23 Jul 19	Safety and accident prevention	23
120	25-26 Jul 19	Internal energy management auditors Legal Energy Personnel Development Project	1
121	26 Jul 19	Dangerous object storage and Safety Reporting (B-Ch.4)	1
122	30 Jul 19	5 S. Accident and safety	8
123	1-3 Jul 19	Engine maintenance	21
124	10 Jul 19	Safety for workers maintenance and the use of electrical protection devices	71
125	18 Jul 19	Basic knowledge about sugarcane truck weighing and sugarcane leaf truck	5
126	20 Jul 19	Knowledge of buying and hiring	5
127	19 Jul 19	Document preparation process and Upload Promotion Through the system "eLBD KTB Online"	5
128	12 Jul 19	Tax payment procedures through the system "E-bill KTB Online"	5
129	26 Jul 19	Asset	30
130	26 Jul 19	Thailand's Sugar Seminar & Workshop 2019 : LS and Special Sugar Technologies	2

No.	Date	Course	Total
131	11 Jul 19	Global Innovation Local Experience	3
132	2-3 Jul 19	Project of preventive measures on safety, occupational health and working environment	4
133	4 Jul 19	Development of intelligent sugarcane farm management system With technology "GIS, Drone" and Internet of Things	8
134	8-13 Jul 19	The personal responsible for energy in theory	1
135	10 Jul 19	Safety for electrical workers, maintenance of electrical equipment and the use of electrical protection equipment	4
136	11, 19, 25 Jul 19	Improvement the office work process class 3-5	61
137	11-12 Jul 19	Global Innovation Local Experience	4
138	25 Jul 19	Substation Grounding Design According to IEEE 80	1
139	26 Jul 19	Thailand s Sugar Seminar & Workshop 2019	2
140	19-20 Jul 19	The application of Office programs and Google Drive	11
141	24 Jul 19	Maintaining dimensional measurement tools	2
142	18 Jul 19	How to choose a flow meter By using the principle of measuring pressure differences	19
143	2-3 Jul 19	Learning Campaign Preventive measures to reduce accidents	2
144	6-7 Jul 19	Safety scaffolding and inspection	1
145	1 Aug 19	Innovation ZERO LIQUID DISCHARGE (ZLD)to reduce water costs in the industry	3
146	21 Aug 19	Maintaining dimensional measurement tools	5
147	22 Aug 19	Repair and maintenance of equipment in compressed air systems	3
148	22 Aug 19	Level sensor applications sensor Pressure and flow sensors	3
149	27 Aug 19	Competition that entrepreneurs must know	3
150	5-6 Aug 19	ISO/IEC 17025;2017	40
151	7 Aug 19	Process Improvement	67
152	21 Aug 19	Pneumatics	21
153	22 Aug - 2 Sep 19	Sugarcane cutting driver 2019	21
154	26-27 Aug 19	Food Safety System Certification (FSSC)22000 version 5	60
155	21 Aug 19	Maintaining dimensional measurement tools	4
156	28-30 Aug 19	Database management and organization using programs "MS-Acces 2016"	2
157	19-23 Aug 19	Working in calculations By using the program "MS-Excel 2016"	2
158	9-10 Aug 19	The Ultimate Protection	2
159	2-3 Aug 19	Chemical Solution for saving product losses	7
160	21-22 Aug 19	Basic inspection of vibration by condition of machinery	2

No.	Date	Course	Total
161	27 Aug 19	Transforming into Smart Manufacturer Seminar	5
162	5 Aug 19	ISO/IEC 17025:2017	2
163	8 Aug 19	Knowledge about optimization and Improve work process analysis (Generation 2)	50
164	16 Aug 19	BOILER TUBES FOR SUGAR INDUSTRY	4
165	21 Aug 19	Maintaining dimensional measurement tools	12
166	22 Aug 19	Preventive maintenance program and positioner work shop	6
167	23 Aug 19	MICRSOFT OFFICE (WORD, EXCEL, POWERPOINT)	25
168	23-30 Aug 19	ABB Ability for Sugar Factory Automationand Optimization	2
169	30 Aug - 1 Sep19	The International Sugarand Cane Conference	1
170	27-30 Aug 19	Reinventing the farm department (Class 1-4)	317
171	22 Aug 19	Preventive maintenance program and positioner work shop	3
172	5-6 Aug 19	ISO/IEC17025:2017	2
173	31Jul - 1 Aug 19	Using the tractor and maintaining the tractor	14
174	2-3 Aug 19	PRODUCTIVITY EFFICIENCY IMPROVEMENT AND ENHANCING PROCESS RUNABILITY WITH FOAM CONTROL	2
175	5-6 Aug 19	ISO/IEC 17025:2017	2
176	7 Aug 19	Occupations that cause danger to the public and are require to the assessment under the law (Version 2)	1
177	8 Aug 19	Correction of accounting errors according to the standard	1
178	27 Aug 19	Competition that entrepreneurs must know	2
179	21 Aug 19	Maintaining dimensional measurement tools	8
180	20-21 Sep 19	Maintenance of the running motor and efficiency	5
181	19-20 Sep 19	Basic knowledge of lubricating oil	10
182	24 Sep 19	Amended factory law	2
183	30 Sep 19	Risk analysis 2019/2020	48
184	19-20 Sep 19	Basic knowledge of lubricating oil	2
185	23-24 Sep 19	Create Passion to Performance	11
186	4 - 5, 9-10 Sep 19	Adjust and enhance work efficiency. Generation 1-2 (50 people)	95
187	17 Sep 19	Basic sugar production process (supervisor level)	40
188	11 Sep 19	Personnel responsible for safety and Storage of dangerous goods	2
189	12-13 Sep 19	Measurement and interpretation	2
190	13 Sep 19	Testing the flow measuring instrument And analyze the results	2

No.	Date	Course	Total
191	19-20 Sep 19	Basic knowledge of lubricating oil	35
192	21 Sep 19	Maintenance of the running motor and Efficiency	6
193	27 - 28 Sep 19	Maintenance and maintenance of the equipment And solving electrical system problems	22
194	30 Sep 19	Hazardous food analysis of Principles of food production "HACCP"	60
195	30 Sep -1 Oct 19	Good mechanic, basic level, DCS level and equipment	28
196	4-5 Sep 19	Skill enhancement for Farm department staff	59
197	9 Sep 19	Developing supervisor skills	51
198	11 Sep 19	The use of robots and industrial automation (SYSTEM INTEGRATION: SI)	2
199	11 Sep 19	Communication skills / presentation and creating speakers	50
200	12-13 Sep 19	Interpretation of measuring instrument calibration results	2
201	13 Sep 19	Skills and techniques for communication and Effective coordination	48
202	19-20 Sep 19	Increasing knowledge for oil users and Lubricants in the industry	20
203	20 Sep 19	Guidelines for pest management	2
204	20-21 Sep 19	Maintenance of the running motor	5
205	24 Sep 19	Amended factory law	2
206	24 Sep 19	Increase program Microsoft Excel, Powerpoint knowledge and skills Gen. 2	41
207	26 Sep 19	Maintenance of pneumatic systems	34
208	27-28 Sep 19	Repairment and maintenance of new equipment, machinery and technology to increase repair efficiency	15
209	29 Sep 19	Conscious living in daily life	68
210	30 Sep -1 Oct 19	Great staff of Braising Raw sugar level Basic DCS system and measuring equipment	8
211	11-12 Sep 19	Strategic motivation of farm supervisors	100
212	20 Sep 19	Personnel Development Project to upgrade the capability and create a network of energy	2
213	19-20 Sep 19	Development of knowledge and ability in using lubricants	49
214	20-21 Sep 19	Maintenance of motors that are currently in use and Efficiency	6
215	19 Sep 19	ISO/IEC 17025:2017	13
216	19-20 Sep 19	Lubricant	4
217	21 Sep 19	Maintenance of motors that are currently in use and Efficiency	2
218	21 Sep 19	Fire training and fire evacuation training (2019)	57
219	23-24 Sep 19	Create Passion to Performance	103
220	26 Sep 19	Defoamer Using and Invertase enzymes	10

Corporate Governance

The Company endeavors to manage its business by adhering to principles of good corporate governance, as it recognizes the benefit and importance of good corporate governance, which contributes to the management of work and business operations in a transparent manner and takes into consideration the best interests of the interested parties in all respects, as well as maintaining verifiability. In order to increase its competitiveness and the shareholders' equity in the long term, the Company has, therefore, established a corporate governance policy in writing which it will communicate to the directors, executives, and all levels of employees in the Company to sign and implement, the details of which are set out below.

Rights of the Shareholders

1. Corporate governance policy with respect to the rights of the shareholders

The Company has established its corporate governance policy with respect to overseeing the rights of the shareholders in writing, whereby it places particular emphasis on ensuring that all shareholders have equal access to the Company's operating results, and that they take part in making various important decisions, as well as ascertaining that the shareholders' rights are protected, promoted and supported, and that the shareholders are not deprived of their rights. The Company's Corporate Governance Policy is as follows:

- (1) The Company has the duty to protect and respect the basic rights of the shareholders, which include the right to purchase, sell or transfer shares, the right to be allocated profits derived from business operations, the right to adequately receive news and information with respect to the business, the right to attend the shareholders' meeting in order to appoint or to remove directors from office, to appoint the Auditor, to allocate dividends, to determine or to make amendments to the Articles of Association or Memorandum of Association, to reduce or increase the capital, and to approve special transactions, etc.
- (2) The Company has a duty to promote and encourage the shareholders to exercise their rights with respect to various matters in the annual general meeting of shareholders, such as the right to propose agenda items to be included in the shareholders' meetings in advance, the right to nominate persons for election as directors in advance, the right to send questions to the meeting prior to the shareholders' meeting, and the right to express their opinions and to raise questions in the shareholders' meeting, etc.
- (3) The Company has a duty to refrain from undertaking any acts deemed to be a violation or limitation or deprivation of the rights of the shareholders to review the information which the Company is required to disclose in compliance with the various requirements and the right to attend the shareholders' meeting; for example, additional documents containing material information shall not be presented unannounced and meeting agenda items shall not be added or material information shall not be changed without prior notice being given to the shareholders.
- (4) The Company has a duty to facilitate the shareholders in exercising their rights, such as by providing updated material information via the Company website including to support and facilitate the shareholders to attend the general meetings of shareholders by selecting meeting venues of appropriate size to serve the shareholders and where the location is not an obstacle to attending the meetings, and is safe. The Company provides opportunities for the shareholders to submit registration documents for attending the meeting in advance of the meeting date in order to minimize the time for document verification on the meeting date. The Company provides registration channels at the meeting venue and also arranges for a barcode system for registration and vote counting to expedite the registration and vote computation process. To facilitate the shareholders, the Company provides stamp duty for the appointment of proxies

2. Disclosure of Information regarding the Shareholders' Meeting

- (1) The Company's policy is to inform the shareholders of information regarding the date, time, location and agenda items for the shareholders' meetings, as well as all information relevant to the matters which will be voted on at the shareholders' meeting in advance, whereby the timeframe shall, as a minimum, be in compliance with that prescribed by the law with respect to each shareholders' meeting. The Company shall give the shareholders the opportunity to review the information prior to the date of the shareholders' meeting by accessing the said information through the Company website. This is to allow the shareholders sufficient time to study the information relevant to the meeting prior to receiving documentary information from the Company and to provide various channels for shareholders to enquire about the details of the shareholders' meetings.
- (2) After the Shareholders' Meetings, the Company will compile the matters discussed thereat, comprising the details of the agenda items, meeting resolutions, and the voting procedure, as well as the questions and opinions of the shareholders, and incorporate them in the "Minutes to the Shareholders' Meeting". These meeting minutes shall then be published on the Company website within 14 days from the date of the meeting, which is in accordance with the rules prescribed by the Securities and Exchange Committee and the Stock Exchange of Thailand.

3. Conducting meetings

- (1) The Company's policy is to facilitate, to the fullest extent possible, the shareholders in exercising their rights to attend and to vote at the shareholders' meeting and will not undertake any acts that would restrict the shareholders' opportunity to attend such meeting in order to allow the shareholders to participate in making decisions regarding the matters which affect the rights and benefits available to them.
- (2) The Company will notify the shareholders of the rules, regulations and procedures for attending the shareholders' meeting in the invitation to the shareholders' meeting, as well as at the shareholders' meeting. The person chairing the meeting shall notify the shareholders attending the meeting of the rules and regulations for conducting the meeting as well as the voting procedures thereat, at which the procedure and the system will be transparent, convenient, fast, and efficient. The resolution result will be shown in a short period of time and the shareholders will know the result immediately. The notification shall be recorded in all minutes of the shareholders' meeting. In addition, the Company may give the shareholders the opportunity to submit questions relevant to the matters to be discussed at the shareholders' meeting prior to the date of the meeting as the Board of Directors deems appropriate.
- (3) The Company shall give the shareholders the opportunity to raise questions relevant to the meeting's agenda items or to the Company and to express their opinion, whereby the Chairman of the Board of Directors will ask the meeting regarding the questions or opinions with respect to each agenda item. All questions and comments of the shareholders with respect to the meeting agenda items or to the Company, as well as the clarifications given by the Board of Directors and/or the executives, shall be recorded in all minutes of the shareholders' meeting.
- (4) The Company gives importance to and respects the rights of the shareholders to convene the annual general shareholders' meeting and encourages all shareholders to attend such meeting.

Equitable Treatment of Shareholders

The Company recognizes that all shareholders must be treated equally and has established the following important policies:

1. Proposing additional matters to be discussed at the shareholders' meeting

The Company's policy is to facilitate the minor shareholders in proposing additional meeting agenda items prior to the date of the shareholders' meeting. In this regard, all additional agenda items proposed for discussion at the meeting by the shareholders and consideration thereof shall be in accordance with the regulations prescribed by the Company.

The major shareholders who hold executive positions shall not add additional meeting agenda items without giving advance notice thereof unless in the case of necessity, particularly important agenda items which require the shareholders to take time to study the information before making a decision.

2. Nomination of candidates for directorship

The Company's policy is to facilitate its minor shareholders in nominating candidates for the position of directors. In this regard, all nominations by the shareholders and consideration thereof shall be in compliance with the regulations prescribed by the Company.

3. Encouraging shareholders to use the proxy form in the case that they are unable to attend the meeting in person

The Company encourages the shareholders to use the Proxy Form, which allows the shareholders to indicate their vote. At least 1 independent director shall be nominated as their proxy, and instructions to complete the form and the background and personal information of each Independent Director for consideration will be provided. The Company will attach the aforementioned Proxy Form to the invitation to the meeting. Moreover, shareholders can download the proxy form from the website www.ktisgroup.com. Any proxy who submits a completed proxy form to the committee at the Shareholders' Meeting shall be allowed to attend the meeting and vote on behalf of the named shareholder.

4. Encouraging shareholders to use voting ballots

The Company encourages the use of voting ballots for important meeting agenda items, such as the entering into connected transactions, acquisition or disposal of material assets, etc. in order to maintain transparency and verifiability in the event of disagreements at a later date.

5. Giving shareholders the opportunity to exercise the right to appoint individual directors

The Company encourages the shareholders to exercise their right to appoint directors on an individual basis.

6. Preventive measures against the use of inside information to seek unlawful benefits

The Company has established measures in its Code of Conduct to prevent its directors, executives and employees from unlawfully using inside information for their own benefit or that of others, for securities trading, conflicts of interest, and confidentiality. Such measures are stipulated in the Code of Conduct, organized in the form of training, and are disclosed on the Company website. Furthermore, the Corporate Secretary has also been assigned as the person responsible for conveying the regulations with respect to the disclosure of information and monitoring and ensuring that the Board of Directors and the executives report their securities holding in compliance with the law, including disclosing information regarding the interests of, and related transactions between, the directors and executives and requiring that all directors and executives who have the duty to report their interests, as provided by the law, notify the Company thereof.

7. Treatment of Foreign shareholders

Every shareholder has the right to receive the information and documents, either in Thai or in English. Any document provided for foreigners shall be translated into English.

The Role of Interested parties

1. Corporate governance policy regarding interested parties

The Company recognizes and gives importance to the rights of all groups of interested parties and not only those which it is required to take into consideration in compliance with the law. In the previous year, the Company re-identified groups deemed as interested parties and established additional policies and measures for acting in the interests of the interested parties in line with its Corporate Governance Policy and Corporate Social Responsibility Policy, both of which have been adhered to. The interested parties of the Company can be categorized into 10 groups as follows:

- | | |
|---|--------------------------------------|
| 1. Employees and their families | 6. Governmental organizations |
| 2. Farmers | 7. Suppliers and Contractors |
| 3. Customers and creditors | 8. Academics |
| 4. Shareholders or investors | 9. Educational institutions |
| 5. Communities local to each
Company place of business | 10. Competitors |

In this regard, the Company has established policies and measures for acting in the interests of the interested parties as follows:

Employees and their families

- (1) The Company will compensate the employees properly and in line with the standard industry salary rate, including the welfare package pursuant to the relevant laws and provident fund based on the consideration of their work in a fair manner and in a way that is quantifiable under the regulations of the Company.
- (2) The Company aims to continuously promote and develop the skills, knowledge and abilities of its personnel, such as by means of organizing training sessions and seminars for its executives and employees in order to build their potential and the readiness of the organization to be a better quality Company.
- (3) The Company treats all of its employees fairly and equally, for example, with respect to employee evaluations, confidentiality regarding employment history, welfare, fundamental rights and the exercise of the various rights of the employees in addition to the rights stipulated by law. Such rights will be informed to employees on a regular basis
- (4) The Company places emphasis on the rights of its employees and gives them the opportunity to file complaints in the event that they do not receive equitable treatment by means of various channels such as a comments box, or contacting the human resources department responsible for such matters
- (5) The Company has a duty to ensure that the employment environment is safe, healthy, and effectively facilitates work. The Company has a policy on the matters relating to occupational health, safety, security and environment by specifying and promoting good health and the provision of a safe working environment, as well as security and relevant measures to prevent accidents and illness occurring at work for every employee.
- (6) The Company encourages policies to protect the environment, which will be implemented to promote responsibility towards the environment, and develop and use more environmental friendly technologies. In addition, the Board of Directors of the Company encourages employee education and training with regard to environmental matters. The program covers the Company's policy on environmental protection, energy consumption and emissions of air pollution, waste handling and recycling, as well as the working environment.

Farmers

- (1) The Company has a duty to build good relations and encourage cooperation with farmers in the long term based on the principles of honesty, reliability and mutual trust.
- (2) The Company supports the establishment of security with respect to the farming profession by acting in the interests of and giving importance to the farmers who are also contractual parties.
- (3) The Company continuously encourages farmers who are contractual parties to develop knowledge regarding farming by means of, for example, organizing an agricultural school training program, so that the farmers can apply the knowledge obtained therein to their profession in order to increase the efficiency of the product with a view to generating high returns from farming. The Company encourages the protection of the environment by supporting the use of more environmentally-friendly technologies, and building awareness of the impact on the environment and encouraging the efficient handling of waste such as utilizing the agricultural waste to the fullest extent possible.

Customers and Creditors

(1) Customer Relations Policy

- The Company has a duty to maintain good relations and to cooperate with customers in the long term, based on the principles of honesty, reliability and mutual trust.
- The Company has a duty to satisfy its customers to the extent possible by means of taking responsibility for, acting in the interests of and considering the issues and needs of the customers as its priority, whereby all executives and employees shall comply with the measures pursuant to this policy
- The Company will perform work based on the principles of Ethics and will not solicit, receive or pay dishonest benefits to the customers and creditors.
 - The Company is committed to presenting and delivering products and services of high standard which meet the needs of the customers;
 - The Company strives to adhere to the various conditions as agreed upon with the customers to the best of its abilities.

(2) Creditor Relations Policy

- The Company has a duty to establish good relations with its creditors and to treat them based on the principles of honesty, reliability and mutual trust by providing information that are accurate, transparent, and accountable to creditors.
- The Company has a duty to be responsible for, pay attention, and give importance to the various promises and conditions as agreed upon with its creditors to the best of its abilities in repaying debts, loans, and interest and in pledging various collateral. In the case that the Company cannot perform the obligations under the agreements, The Company will inform creditors in advance to mutually find solutions to the problems.

Shareholders or Investors

See Section 1. Rights of the Shareholders

Communities local to each Company place of business

- (1) The Company and its employees are committed to behaving and conducting themselves as good citizens and in ways that benefit society and the community.
- (2) The Company has a duty to treat the communities local to each Company place of business amicably and to give assistance to and promote the livelihood of the communities, as well as to be responsible for remedying any situation arising as a consequence of the Company's business operations, in a fair and equitable manner.
- (3) The Company has a duty to oversee and support activities which are beneficial to society and to willingly cooperate with governmental and non-governmental organizations and to make sacrifices for the better good.

Governmental Organizations

- (1) The Company has a duty to act in compliance with all applicable and prescribed laws and rules.
- (2) The Company will promote the various activities of governmental organizations as is deemed appropriate.

Supplier IIA: Contractor

- (1) The Company has a duty to maintain good relations with all suppliers and contractors.
- (2) The Company has a duty to give all suppliers and contractors an equal opportunity to present their products/services, whereby the executives and employees related to the suppliers and contractors shall comply with the following measures. All executives and employees shall:
 - Treat the suppliers and contractors honestly and equitably;
 - All considerations and decisions shall be based on the comparison of quality and various conditions, while at the same time taking into account the interests of the Company, both in the short and long term, and the Procurement Manual must be strictly complied with in the following areas:
 - quality and services
 - pricing
 - delivery time
 - reliability
 - Company reputation and referred successful cases
 - records of business dealings of the Company
 - condition of transactions
 - other aspects as appropriate

Academics

- (1) The Company gives academics the opportunity to learn the information, methods and work procedures of the Company, as well as the opportunity to exchange knowledge for academic purposes and for conducting various research studies which are beneficial to the Company.
- (2) The Company encourages the participation in studies in the use of technology for improving various work procedures, as well as studies for the purpose of developing innovations which would be beneficial to the development of the Company.

Educational Institutions

- (1) The Company will promote knowledge-sharing regarding technology and the manufacturing process at educational institutions, whereby it will place particular emphasis on schools and educational institutions in communities local to each Company place of business as a priority.
- (2) The Company will promote the various activities of the educational institutions as is deemed appropriate.

Competitors

- (1) The Company will not perform any act which would violate or contradict any competition law or may cause damage to the reputation of its competitors.

2. Measures for compensating interested parties in the event of damage arising from wrongful acts

1) Preventive measures against the use of inside information by the directors, executives and employees

The Company has established measures relating to the use of inside information which its directors, executives, and employees must comply with as follows:

- The Corporate Secretary has the duty to inform the directors and executives to report their securities holding, and that of their spouses, as well as their children who are minors in the Company, and to report any changes thereto pursuant to Section 59 and the terms of punishment pursuant to Section 275 of the Securities and Exchange Act B.E. 2535.
- The Company will advise its directors, executives and employees who are in possession of inside information against the disclosure of material information prior to the sale and purchase of Company shares, including the Company's financial statements, which will have an impact on the price of securities to be offered to the public, up to and including one month prior to the public disclosure, as failure to do so would be deemed a violation of the Securities and Exchange Act.

2) Preventive Measures against Conflicts of Interest of Executives and Employees

The Company has established measures to prevent its directors and executives from unlawfully using inside information for their own benefit or that of others in the Code of Conduct for its executives and employees as follows:

- Executives and employees shall not undertake acts with a view to either seeking benefits or misappropriating assets which are the property of the Company or of the customers of the Company, as their own or for others, which are deemed to be in conflict with the interests of the Company.
- Executives and employees should avoid situations or personal activities and gaining financial benefits which may be in conflict with the work duties by which they are bound and which have an impact on the protection of the Company's interests.
- The Company will avoid delegating duties and responsibilities to the executives and employees in the event that such acts may lead to situations that may be in conflict with the interests of the Company or that of the Company's customers.
- In the event that the executives and employees participate in external activities or hold external positions, such as that of directors, advisors, representatives, or employees in other organizations, the said activities or positions shall not be in conflict with the interests of the Company, whether directly or indirectly, and shall not cause the Company to suffer any damage, and shall not have any impact on the performance of their work duties.
- All executives and employees are prohibited from participating or holding positions in other organizations operating the same type of business as that operated by the Company or those deemed to be the Company's competitors, or those whose business may be in conflict with the interests of the Company.

In this regard, the Company shall be given a report on the interests regarding the entering into transactions with companies belonging to the directors, executives and employees on a regular basis. The Company's Internal Auditor has a duty to report information regarding various interests to the Audit Committee for its acknowledgment and consideration. The Audit Committee will then give the Board of Directors a report on the summary of information on various interests for its further acknowledgment and consideration, whereby the Internal Auditor will be responsible for monitoring the results on a regular basis.

Furthermore, the Company has established measures for compensating the interested parties in the event that they suffer damage as a consequence of the following violations:

- **Preventive measures against damage arising from violations against employees and their families**

The Company has established locations for receiving complaints and/or suggestions from employees as channels for employees who have been affected by the work operations to file complaints.

- **Preventive measures against damage arising from violations against customers and creditors**

The Company deals with customers in compliance with its customer relations policy and has established a customer service department as a center for receiving customer complaints in the event that customers encounter issues or require assistance.

In order to prevent against any damage arising from violations against the debtors and creditors, the Executives will consider the qualifications of all debtors and creditors prior to entering into transactions with a view to avoiding future problems, and in doing so, base their consideration on the principles of honesty and reliability.

- **Preventive measures against damage arising from violations against shareholders**

The Company undertakes steps to protect and oversee the basic rights of the shareholders, including the right to receive information, the right to attend shareholders' meetings, as well as to encourage the shareholders to exercise their rights beyond the provisions of law.

- **Preventive measures against damage arising from violations against local to communities of each Company place of business**

The Company has established measures to prevent damage arising from violations against the communities local to each of the Company place of business in line with its Corporate Social Responsibility Policy by building good relationships with the surrounding communities as well as giving them assistance and support with a view to promoting their livelihoods.

- **Preventive measures against damage arising from violations against government organizations**

The Company has established measures to prevent damage arising from non-compliance with the various applicable laws and regulations, whereby the Company's legal department will be responsible for monitoring the work performance of the departments of the Company on a regular basis in order to ensure their compliance with the law.

- **Preventive measures against damage arising from violations against suppliers and contractors**

The Company has established measures for preventing damage arising from violations against the suppliers and contractors, whereby the Company has a policy to build good relations with all of its suppliers and contractors and, furthermore, treats all suppliers and contractors equitably.

- **Preventive measures against damage arising from violations against academics**

The Company gives academics the opportunity to visit and observe the work process for providing services and also provides information on the methods and procedures pertaining to the provision of services for academic purposes. It also cooperates with the academics in studying and improving technologies to be used for providing services on a regular basis.

- **Preventive measures against damage arising from violations against educational institutions**

The Company cooperates with educational institutions by giving them the opportunity to visit its places of operation on-site and by organizing seminars to share technological knowledge and details relating to its service process. The Company also gives the educational institutions financial support for various activities on a regular basis.

3. Participation channels of interested parties

The Company has established numerous participation channels for interested parties as follows:

- (1) The Company has established a channel for receiving complaints and/or opinions and an additional channel via email, which will be sent to the Executives via the Internal Audit Department, **Tel : 02-692-0869-73 Ext. 183 Ext. 154**
E-mail : internalaudit@ktisgroup.com
- (2) The Company gives its employees the opportunity to submit suggestions to the Board of Directors via the Company website under the Investor Relations section via the Company Secretary Department **Tel : 02-692-0869-73 Ext. 175**
E-mail : cs@ktisgroup.com
- (3) The Company has taken steps to ensure that its representatives visit the community in the areas neighboring the factories every year.

4. Mechanisms for protecting Whistle-Blowers

- (1) The Company has established channels for filing reports or complaints regarding violations of the law or of the Code of Conduct, Financial Reports or deficiencies in the internal control system according to the channel in No. 3.3.
- (2) The Company has established measures for protecting employees who are Whistle-blowers, whereby:
 - The Whistle-Blowers can choose not to reveal themselves if they believe that the revelation would lead to lack of security or damage.
 - The Company will keep the information secret and safeguard the security of the Whistle-Blowers by setting up systems to protect the Whistle-Blowers who are employees, including those cooperating in investigation of the facts of such complaint such as work disturbance, transfer, dismissal of employment, and intimidation etc.
- (3) The Company has put in place procedures to be followed upon receiving reports from Whistle- Blowers, whereby the Internal Audit will first compile and summarize the issues and present them to the Internal Audit Committee for consideration and investigation of facts and evidence. If it is found that such information impacts on the Company, the issue shall then be proposed to the Board of Directors of the Company for further consideration.

Disclosure of Information and Transparency

The Company has a policy to disclose information regarding the Company, including financial information and other information, in an accurate, complete, timely, and transparent manner, via easily-accessible channels, and in a fair and reliable manner.

1. Internal control and entering into transactions with potential conflicts of interest

- (1) The Company's policy is to prevent and eliminate any potential conflicts of interest by prescribing that all transactions with potential conflicts of interest be in compliance with the regulations and steps determined by the Company and all applicable laws.
- (2) The Company will undertake acts to ensure that its directors, executives, and/or major shareholders, as the case may be, do not operate businesses that are similar to or in competition with that of the Company, or that decrease the Company's competitiveness, or enter into related transactions whereby the other benefits resulting thereof may be in conflict with the best interests of the Company or its subsidiaries. The directors, executives and/or major shareholders of the Company, as the case may be, shall inform the Company if the directors, executives, and/or major shareholders hold shares in companies whose business operations are similar to those of the Company or its subsidiaries in order for the Company and the Audit Committee to consider whether or not such shareholding is in conflict with the best interests of the Company or its subsidiaries.
- (3) The Company also places emphasis on the importance of a good internal control system and has arranged for an Internal Audit Office to audit the performance of work in each field of work so as to prevent errors and to ascertain that work is performed in a transparent manner. Auditing is completed periodically and reports thereof are submitted to the Audit Committee for consideration.

2. Disclosure of Information

The Company discloses information in compliance with the relevant laws or regulations via the Stock Exchange of Thailand and the Company website under the Section entitled “Investor Relations”. The Company has delegated the Investor Relations and Corporate Communications Department to be responsible for the disclosure of information as well as for regularly updating information, and acting as the representative in communicating information, news and updates on activities to the Company and the investors, analysts, and general public. Please contact the Investor Relations and Corporate Communications Department, Tel 02-692-0869-73 Ext. 193 Ext, 26, Email : ir@ktisgroup.com

Activity	Time/Year
Opportunity Day	4
Company Visit	9
Contact Us by Email	9
Factory Visit	21

3. Disclosure of the Corporate Governance Policy

The Company has disclosed its approved Corporate Governance Policy, as well as the results with respect to compliance with the aforementioned Policy via various channels such as the Annual Report and the Company website

4. Report on the responsibilities of the Board of Directors with respect to the Financial Report

The Company requires that there be a report on the responsibilities of the Board of Directors with respect to the financial report, which shall be presented alongside the auditor’s report in the annual report. The contents thereof shall verify compliance with accounting principles and the financial report shall consist of accurate, complete and actual information in accordance with accounting standards. The aforementioned reports shall bear the signatures of the Chairman of the Board of Directors and the Managing Director.

5. Disclosure of the Roles and Duties of the Board of Directors and Subcommittees

The Company has disclosed the roles and duties of the Board of Directors and Subcommittees, the number of meetings held and the number of times each Board member attends meetings in the previous year, as well as the comments in relation to the performance of their duties in the Annual Report.

6. Disclosure of possession of the Company’s shares

The Company requires that Directors report their purchase-sale of / possession of shares in the Company to the Board of Directors.

7. The monitoring of the subsidiaries and associates’ operation

The Company has implemented the monitoring measures on the operation of its subsidiaries and associates by the nomination of directors of such subsidiaries and associates to utmost reflect the ratio of share holding in such companies. The implementation also includes the policy of company legal binding signatures’ conditions that at least 1 director nominated by the Company must provide the signature to be legal binding upon the subsidiaries and associates

The Company also determined that the subsidiaries and associates’ operation and turnover must be periodically reported the Company’s executive committee. The Company also encourages its subsidiaries and associates to implement the Company’s corporate governance framework.

The shareholders agreement between the Company and other shareholders for the management of the subsidiaries and associates

Currently, the Company holds shares of GGC KTIS Bio Industrial Co., Ltd. (GKBI) through its subsidiaries named KTIS Bio Ethanol Co., Ltd. (KTBE) for the portion of 50% of all issued shares. So GKBI is an associate of the Company.

KTBE also entered into shareholder agreement between GGC Bio Chemical Co., Ltd. (GGC Bio) who is also a shareholder of GKBI for the portion of 50% of all issued shares. CCG Bio is a subsidiary of Global Green Chemical PLC. (GGC). The summary of shareholder agreement of GKBI between KTBE and GGC is as follows :

- CCG Bio shall study, research the marketing plan and support the marketing of GKBI, shall support the research and development of GKBI ethanol production, shall assign its personnel to participate in GKBI construction project.
- KTBE shall support the procurement of and plan for the procurement of GKBI's raw material, shall support the research and development of cane breeding, shall provide utility to GKBI, shall assign its personnel to participate in GKBI construction project.
- GKBI's board of directors composes of 7 directors. 3 directors are nominated by KTBE and 3 directors are nominated by GGC Bio. 1 independent director shall be nominated by mutual agreement of both shareholders, and the independent director shall be the chairman of the board.
- The general resolution of the board of directors shall get an approval at least 50% of directors attending the quorum. The special resolution of the board of directors shall composes get an approval at least from 2 directors nominated by KTBE and from 2 directors nominated by GGC Bio.
- The general resolution of the shareholder meeting shall get an approval from shareholder at least 51% of all issued shares. The special resolution of shareholder meeting shall get an approval from shareholder at least 75 % of all issued shares.

Responsibilities of the Board of Directors of the Company

The Company recognizes the importance of selecting directors who demonstrate leadership, are visionaries, and who have experience, knowledge and ability and demonstrate independence in making decisions in the best interests of the Company and the shareholders overall. The Company also recognizes the importance of clearly separating the roles and duties of the Board of Directors and the Management and overseeing the work system to ensure that its various activities are in compliance with the laws and ethical standards.

The Company has established its corporate governance policy while taking into consideration various factors including the responsibilities of the directors, whereby the important policies relevant to this matter are as follows:

1. Structure of the Board of Directors

- (1) The Company values transparency and verifiability in its work operations, and, therefore, the Chairman of the Board of Directors is not the person holding the position of the Chief Executive Officer or the President. The Board of Directors of the Company has, furthermore, approved the definition of the independent director in line with the criteria and definitions prescribed by the Securities and Exchange Committee.
- (2) The Company has prescribed formal procedures for selecting directors, and in doing so, it adheres to principles of transparency and is free of influences by the Management or shareholders with authority. That is to say, the Nomination and Remuneration Committee shall be responsible for recruiting persons to hold directorship positions and shall consider and select appropriate candidates based on their educational background, ability, work experience etc., whereby such persons shall also be qualified and shall not possess the prohibited characteristics as prescribed by the law as well as to be in line with the business strategy of the company. Candidates shall be selected in line with the duties and responsibilities of the position of a director of the Company and/or a director who is a member of various subcommittees who will be recruited from experts in various specialized fields or Professional Search Firms or Directors Pools or similar organizations. Upon having selected the appropriate candidates for directorship, the names of the said candidates shall be proposed to the Board of Directors for further consideration and appointment as directors.

- (3) The Company requires that the names of the members of the Board of Directors and Subcommittees be disclosed, whereby details relating to each director's name, position, age, educational background, shareholding proportion and relationship with the executives are disclosed via various channels, including the Annual Report and the Company website.
- (4) The directors of the Company shall hold their positions for a term of three years. Any retiring director may be re-appointed by the meeting of shareholders.
- (5) The Board of Directors of the Company shall consist of a minimum of three independent directors, being an aggregate of not less than one-third of the total number of directors. The independent directors of the Company shall be qualified and shall not have the prohibited characteristics determined by the Board of Directors, and such requirements shall not be less stringent than those prescribed by the Capital Market Supervisory Board and the Stock Exchange of Thailand.
- (6) The Company will appoint a Corporate Secretary to perform the various duties prescribed by the law as well as those delegated by the Board of Directors of the Company.

2. Leadership and Vision

- (1) The Board of Directors shall demonstrate leadership, and shall be visionary, implementing Company strategy, goals and policy in managing the business plan, and annual budget of the Company and be independent in making decisions in the best interests of the Company and the shareholders overall. The Company has, therefore, clearly separated the roles and duties of the Board of Directors and those of the Management, whereby the Management shall be responsible for obtaining various information required for consideration while the Board of Directors shall have the duty to make decisions on such matters accordingly.
- (2) The Company hopes that its business will be stable and successful in the long term, and has therefore coordinated with the Management to consider, review and establish a vision and mission that corresponds to the changing environment, as well as the targets in the Business Plan and Financial Statement in the previous year, while taking into consideration the maximum increase in economic value and long-term stability of the Company and its shareholders. The Board of Directors shall also have the duty to oversee and monitor the administration of the Management to ensure that they are in line with the Business Plan in an efficient and effective manner.
- (3) The Board of Directors shall monitor the management to ensure that the management takes the Company strategy into consideration in management meetings and conforms to the strategies set out. The management reports to the Board of Directors 4 times per year.
- (4) The Board of Directors of the Company encourages corporate governance practices within the organization. The Board of Directors are, therefore, leaders in establishing guidelines for good corporate governance, the Code of Conduct, measures and steps for approving related transactions with related companies or persons with potential conflicts of interest, and in clearly separating the scope of authority of the shareholders from that of the Board of Directors and the scope of authority of the Board of Directors from that of the Executives, and the various Subcommittees, so as to create a balance of power and ensure mutual verifiability in an independent manner.

3. Conflicts of Interest

- (1) The Company will consider related transactions which may cause potential conflicts of interest between the shareholders, directors and the Management with due care, honesty, reason and independence within the framework of good ethics. The Company will also fully disclose all information while considering the overall best interests of the Company as a priority and will strictly comply with the rules and procedures provided in the notifications, orders or regulations of the Stock Exchange of Thailand. The Audit Committee will give its opinion as is necessary and appropriate given that particular related transaction.
- (2) The Company has established measures and steps for approving related transactions with related companies or persons who have potential conflicts of interest, whereby persons with direct and indirect conflicts of interest shall be prohibited from considering the approval of the said transactions, and the Audit Committee shall participate in considering and giving its opinion as is necessary and appropriate for the best interest of the Company. Information pertaining to the related transactions shall be disclosed in the remarks to the financial statement in line with generally accepted accounting standards in the Annual Report.

4. Business Ethics

- (1) The Company has established a Code of Conduct for use by all executives and employees as a guideline for performing their work, and to which they shall adhere strictly and at all times. The said Code of Conduct includes issues regarding honest business practices, fair and equitable treatment of interested parties, prevention of wrongful acts against interested parties, conflicts of interest, confidentiality, and misuse of information, as well as bribery, gifts, and rewards. The Company has assigned the Internal Audit Department to monitor and conduct investigations in relation to compliance with such Code of Conduct.
- (2) The Company will monitor and oversee its business operations and the performance of work duties by the directors, Management, and employees, and adhere to the principles of virtue and ethics in addition to the rules and regulations of the Company and applicable laws.
- (3) The Company's policy requires that its directors, executives and employees avoid or refrain from selling and purchasing securities of the Company within a period of one month prior to the disclosure of material information to the general public which may have an impact on the price of the securities of the Company, such as financial information.

5. Joining or separating positions to create a balance of power with respect to work management

The Company has clearly defined and separated the scope of authority and responsibilities of the Board of Directors, the Executive Committee, Audit Committee, Nomination and Remuneration Committee, Risk Management Committee, as well as the Chief Executive Officer. The Company also requires that Chairman of the Board of Directors is not the person holding the position of the Chief Executive Officer or the President and that he/she has is not related to the Management in order to prevent an executive from having unlimited power and to be able to audit and establish a balance for work management.

6. Subcommittees

The Board of Directors of the Company has arranged for the appointment of Subcommittees to assist the Board of Directors in studying relevant details and monitoring and overseeing the performance of work, as well as to screen the matters to which they have been assigned. The scope of authority and responsibilities of the said Subcommittees have been clearly defined.

7. Roles, Duties and Responsibilities of the Chairman of the Directors of KTIS Group

- (1) The Chairman of the Directors summons the yearly Board of Directors meeting, and monitors the distribution of invitation letters, including any accompanying documents for the Board of Directors to obtain adequate information in timely manner.
- (2) The Chairman of the Directors takes the position of the Chairman of the meeting and encourages the Directors to perform in accordance with the laws and regulations.
- (3) The Chairman of the Directors allows directors to express their opinions and considerations, and makes decision with thorough consideration and with honesty and integrity.
- (4) The Chairman of the Directors shall receive reports from the management and subcommittees to follow up on the operation and progress of work of the Company in the Board of Directors' meeting.
- (5) The Chairman of the Directors encourages and sets up standards to monitor the corporate governance of the Board of Directors.
- (6) The Chairman of the Directors takes the position of the chairman of the shareholders' meeting and ensures that the meeting is in compliance with the articles of association and meeting agenda.
- (7) The Chairman of the Directors encourages the Directors and shareholders to communicate efficiently.

8. Roles, Duties and Responsibilities of the Board of Directors of KTIS Group

- (1) The Board of Directors shall define objectives that promote sustainable value creation and governance outcomes as a framework for the operation of the company.
- (2) The Board of Directors shall ensure that the company's annual and medium-term (for example, 3-5 years) objectives, goals, strategies, and plans correlate and align with the company's long-term objective, while considering the business environment, opportunities, and the company's risk appetite. The board shall ensure that the company's medium-term objectives, goals, strategies, and plans are annually reviewed and updated as appropriate.
- (3) When developing strategies and plans, the Board of Directors shall promote innovation and the use of technology to enhance competitiveness, respond to stakeholder concerns and expectations, and meet social and environmental responsibilities. The Board of Directors has a duty to consider and approve material issues with respect to the operation of the business, as well as to oversee that the Management operates the business in line with the prescribed policies and plans, including the budget, in an efficient and effective manner.
- (4) With respect to the Board of Directors having established a Corporate Governance Policy in writing and given its approval thereof as previously mentioned; the Board of Directors revises the said Corporate Governance Policy at least once a year.
- (5) The Board of Directors has issued a Code of Conduct in writing and distributed the same to the directors, executives and new employees. The Board of Directors has, furthermore, revised the various guidelines for conduct with respect to the directors, executives and existing employees in order to understand the moral standards which the Company applies in operating its business, whereby the Board of Directors of KTIS group has assigned the Internal Audit Department to closely monitor compliance with the said Code of Conduct.
- (6) The Board of Directors has exercised due prudence in considering conflicts of interest, as well as connected transactions with potential conflicts of interest with those of the Company whereby the interests of the shareholders are deemed as the priority. Notwithstanding this, the material connected transactions have to be approved by the Board of Directors.
- (7) The Board of Directors has put in place a system for controlling financial reporting and compliance with the various rules and regulations, whereby an Internal Audit agency shall be responsible for such duties. The said duties must be independent of the performance of other work and such system shall be revised at least once per year.
- (8) The Board of Directors and the Audit Committee have a duty to jointly consider the annual and quarterly financial statements and financial information in the Annual Report and to jointly evaluate the adequacy of the internal control system of the Company for disclosure to the investors.
- (9) The Board of Directors and the Risk Management Committee have a duty to jointly consider and determine the Risk Management Policy to be applied throughout the organization, whereby the Management has been assigned to oversee compliance with the said policy and to report relevant issues to the Board of Directors and/or Risk Management Committee on a regular basis. The Board of Directors will ensure that the system is reviewed or that the effectiveness of the risk management is evaluated at least once per year and in the event that there are changes to the risk level, and will also give importance to early warning signs and unusual transactions.
- (10) The Board of Directors has a policy to encourage the Directors to develop their knowledge by specifying that, annually, at least 1 director has to take a course or seminar activity which increases their knowledge regarding the position of director of the Company.
- (11) The Board of Directors consider the effectiveness of directors and has a policy that the number of director positions directors can hold simultaneously in other companies but should not exceed five listed companies
- (12) For businesses that the company has or plans to hold a significant investment in (such as between 20 percent and 50 percent of shares with voting rights), other than subsidiaries, the Board of Directors shall ensure that shareholder agreements or other agreements are in place to enable the company's performance monitoring and participation in the businesses' management, including for approval of significant transactions and decisions. This is to ensure that the company has sufficient, accurate, and timely information for the preparation of its financial statements that conform with relevant standards

- (13) The Board of Directors shall prioritize and promote a corporate culture that embraces innovation and ensure management's inclusion of innovation in corporate strategy, operational development planning, and operation monitoring.
- (14) The Board of Directors shall nurture innovation that enhances long-term value creation for the business in a changing environment. Such innovation may include designing innovative business models, products and services, promoting research, improving production and operation processes, and collaborating with partners.
- (15) The Board of Directors shall establish a framework for governance of enterprise IT that is aligned with the
- (15) company's business need and priorities, stimulates business opportunities and performance, strengthens risk management, and supports the company's objectives by allocating adequate and optimal investment in IT resources. And also ensures IT security policies and procedures are in place.
- (16) In assessing the effectiveness of the company's internal controls and risk management, the Board of Directors shall consider the results of internal controls and risk management at its subsidiaries and businesses in which it has a significant investment (between 20 percent to 50 percent of shares with voting rights).

9. Authorization of the Board of Directors

- (1) Appoint, remove, and/or delegate authority to a consultant of the Board of Directors of the Company and other subcommittees
- (2) Arrange for consultation with the expert or the consultant of the Company (if any) or an outsourced expert if necessary at the expense of the Company
- (3) Approve policies or principles, and assign them to the management to implement in accordance with the agenda efficiency and effectively
- (4) Approve the investment in fixed assets, equity instruments, debt instruments, investments or joint ventures in new projects in amounts that exceed the authorization power of the executive committee and laws
- (5) Approve debt write-offs from the account according to the conditions specified by the Company
- (6) Approve the business plan and the annual budget of the Company
- (7) Approve share repurchase of not over 10% of the paid up capital or according to the laws Specified
- (8) Approve financial transactions which exceed the authorization power of the management
- (9) Approve the disposal of the fixed assets of the Company in amounts which exceed the authorization power of the executive committee and according to the laws.
- (10) Approve financial transactions which exceed the authorization power of the executive Committee
- (11) Approval on appointment of person(s) who will be director(s) casting the vote(s) in subsidiaries whereby such person(s) who will be appointed as director(s) shall do any act for the best interest of the subsidiaries (not the Company). The Company has specified that the appointed person(s) shall cast the vote in the subsidiaries in accordance with the approval of the Board of Directors of the Company on material matter(s) which is required the resolution of the Board of Directors of the Company if such matter(s) is done by the Company. The appointment of person(s) to be director(s) of subsidiaries on behalf of the Company shall be done in proportion to the Company's shareholding in the subsidiaries. The person(s) appointed as director(s) in subsidiaries shall procure the subsidiaries to have their Articles of Association contained information regarding the related parties transaction, acquisition and disposition of assets, or other material transaction in compliance with the Company regulations for the disclosure of mentioned transactions, including keeping information and accounting records so that they could be verifiable by the Company and prepare the financial statements in time.

10. Board of Directors' Meeting

- (1) The Board of Directors will convene a Board of Directors' Meeting at least five times per year and such meetings shall be conducted in accordance with the Company's Articles of Association, the Public Limited Companies Act B.E. 2535, and the rules and regulations prescribed by the Stock Exchange of Thailand. The Chairman of the Board of Directors, in acting as the Chairman of the Meeting, will encourage the exercise of discretion in a prudent manner and will allow sufficient time for the Executives to propose matters for consideration, as well as for the directors to carefully discuss the material issues. The Chairman will also arrange for the minutes of each meeting to be recorded in order to ensure verifiability by the directors and relevant persons. The directors have a duty to attend all Board of Directors' Meetings unless in the case of special circumstances. The Directors who will receive direct or indirect benefits have no right to vote and shall leave the meeting during that particular agenda item.
- (2) The minimum quorum at the time that the Board of Directors votes is two-thirds of the total number of Directors.
- (3) The Company requires that the Management prepare and submit a report on the operating results to the Board of Directors for acknowledgment on a regular basis in order for the Board of Directors to be able to continuously and promptly supervise, control and oversee the performance of work by the Management. The Company shall issue the minutes of the meeting in written form and retain an original copy of the invitation letter and accompanying document in electronic files in order for them to be convenient for directors and relevant persons to examine.
- (4) The Chairman of the Board of Directors shall convene the Board of Directors' Meeting and shall consider and determine the meeting agenda items, whereby he/she may consult with the Managing Director, Corporate Secretary or Company Advisor in doing so. Each director has the right to propose matters to be included in the agenda of the Board of Directors' Meeting.
- (5) The Board of Directors may invite the Executives, employees, or Advisor(s) of the Company to attend the Board of Directors' Meeting to give additional information on the matters discussed thereat.
- (6) The secretary of the Board of Directors shall, prior to the date of the Board of Directors' Meeting in the following year, prepare a schedule for the meetings for the coming year in order for the Board of Directors to be informed thereof in advance and so that they can plan ahead and allocate time for attending the said meetings accordingly.
- (7) In determining the number of Board of Directors' Meetings, consideration shall be given to their appropriateness based on the duties and responsibilities of the Board of Directors. The Corporate Secretary will prepare an agenda for the annual general meeting specifying the matters to be considered at each meeting so that the Board of Directors is informed of the various details to be considered thereat in advance.
- (8) In each of the Board of Directors' meetings, the company secretary will distribute the meeting documents to the Directors to consider before the meeting, pursuant to the relevant laws, prepare documents and disclosures relevant to the meeting and distribute them to the Directors at least 5 working days before the meeting.
- (9) All Board of Directors' Meetings shall be strictly in compliance with the Company's Articles of Association and the Public Limited Companies Act B.E. 2535. All directors shall be given equal opportunity to discuss the material issues and the Secretary of the Board of Directors shall attend the meetings and record the minutes thereof including the various questions and suggestions of the directors to ensure that the matters discussed can be monitored and verified by the directors and relevant persons.
- (10) The Chairman of the Board of Directors shall be responsible for allocating adequate time for presenting the information provided by the Management and for all of the directors to discuss the material issues with due prudence. The Chairman of the Board of Directors shall encourage the directors attending the meeting to exercise their discretion in a prudent manner and ask the meeting whether or not there are any further questions or disparate opinions with respect to each agenda item being considered.
- (11) The Board of Directors' policy requires that the directors who are not Executives meet amongst themselves as necessary in order to discuss the various management issues at hand. Members of the Management shall not attend the said meetings and the Managing Director shall be informed of the meeting results.
- (12) The Board of Directors has a policy for the Company Secretary to set the schedule for the annual Board of Directors' meetings in advance for the Directors to perform their duties efficiently.

11. Self-Evaluation of the Board of Directors

- (1) There is annual self-evaluation of the Board of Directors as a whole to acknowledge their efficiency in working together and development in the following areas:
 - Qualifications of the Directors
 - Roles, duties and responsibilities of the Directors
 - Board of Directors' meetings
 - Performance of the Directors
 - Relationship with the management
 - Self-development of the Directors and development of executives
- (2) Process of self-assessment of the Board of Director as a group
 - The Board of Directors considers the self-assessment form of the Board of Directors as a group to be accurate in accordance with specified regulations.
 - The Company Secretary summarizes the self-assessment of the Directors as a group and reports to the Board of Directors for their consideration
- (3) There is an annual self-assessment of the individual members of the Board of Directors to consider their performance and their position as a Director of the Company in order to improve their performance in the following areas:
 - Qualifications of the Director
 - Board of Directors' Meetings
 - Roles, duties and responsibilities of the Director
- (4) Process of self-assessment of the individual members of the Board of Director is as follows;
 - The Board of Directors considers the self-assessment form of the individual members of the Board of Directors to be accurate in accordance with the specified regulations.
 - The Company Secretary summarizes the self-assessment forms of the individual members of the Board of Directors and reports to the Board of Directors for their consideration.
- (5) There is an annual self-assessment of the subcommittees as groups, namely the audit committee, nomination and remuneration committee, executive committee, and risk management committee, to acknowledge the performance of working together and in order to improve themselves in the following areas:
 - Qualifications of the Directors
 - Board of Directors' Meetings
 - Roles, duties and responsibilities of the Directors
- (6) Process of self-assessment of the subcommittee as a group is as follows;
 - The subcommittee considers the self-assessment form of the subcommittee as a group to be accurate in accordance with the specified regulations.
 - The Secretary of each committee summarizes the self-assessment of the subcommittee as a group and reports to the subcommittee for their consideration.
 - The Company Secretary reports the results of the self-assessment of the subcommittees to the Board of Directors.

12. Remuneration of directors and executives

- (1) The Board of Directors of the Company shall consider and determine the remuneration of the directors and shall propose the same to the meeting of shareholders for approval. In this regard, in determining the directors' remuneration, the Board of Directors shall compare the standards pertaining to the payment of remuneration in companies in the same industry and shall give consideration thereof based on fair standards. Consideration shall be given to the experience, obligations and duties, scope of the role, as well as accountability and responsibility, including the benefits which the Company would receive from each director. The directors who have been delegated additional duties and responsibilities should receive higher remuneration as appropriate. For example, a director who is a member of the Audit Committee may receive a higher rate of remuneration for his role in the Audit Committee.

- (2) The remuneration of the Chief Executive Officer and Executives shall be in accordance with the principles and policies determined by the Board of Directors, whereby consideration shall be given to the best interests of the Company. The determination of salaries, bonuses and incentives in the long term shall be in line with the performance of the Company as well as that of each individual executive.
- (3) All the Directors who are not executive directors will assess the performance of the Chief Executive Officer of the groups of the Company annually in order to use such assessment in the remuneration consideration of the Chief Executive Officer of the groups of the Company by applying the standards agreed with the Chief Executive Officer of the groups of the Company according to the main criteria. This includes the results of the financial operations, the results of their implementation in accordance with the Company's strategic objectives in the long term, and the development of the executives. Notwithstanding the above, such directors who are not executive directors shall propose the results of Managing Director's assessment to the Board of Directors to consider.

13. The Subcommittee Members: duties and responsibilities

The Board of Directors shall appoint members of the subcommittee from the Board members to serve on the committee to perform special duties. The subcommittee members will be assigned from the current Board of Directors to set up 4 committees; Executive Committee, Audit Committee, Nomination and Remuneration Committee and Risk Management Committee.

1) Executive Committee

The term of membership of the chairman and members of the Executive Committee is three years from the date of their appointment. Any retiring member of the Executive Committee may be re-elected. In the event that there is a vacancy in a Director's office for reasons other than retirement, the Board shall elect a sufficiently qualified candidate as a member to ensure that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power, duties and responsibilities of the Executive Committee

- The Executive Committee is responsible for managing our business in accordance with the objectives of our business operations, provided that management of our business shall be subject to policies, rules or orders prescribed by the Board. In addition, the Executive Committee is responsible for reviewing matters to be proposed to the Board for further approval;
- The Executive Committee shall prepare our vision, business strategies and direction, business policies, targets, guidelines, operational plans and our annual budget, and shall present the same to the Board for approval;
- The Executive Committee shall set up business policies and management authorization, shall approve our annual budget and comply with the business plan and strategy according to the policies and business model presented to the Board;
- The Executive Committee shall efficiently oversee and monitor our operations in accordance with our management policies and guidelines as approved by the Board;
- The Executive Committee shall approve matters or actions to be taken in the ordinary course of our business, so long as it is within the Board's approved budget, does not involve the incurring of liabilities or encumbrances exceeding Baht 1,000 million, and does not have a term of over five years (liabilities or encumbrances include project finance facilities granted to us); to us)
- The Executive Committee shall make the following reports on our results of operations:
 - (1) A quarterly report of our performance shall be submitted within the timeframe prescribed by the SET;
 - (2) An auditor's report in respect of our financial statements, including our annual and quarterly financial statements, shall be submitted within the timeframe prescribed by the SET; and
 - (3) Other reports deemed appropriate by the Executive Committee;
- The Executive Committee shall perform any other activities as designated by the Board; Nevertheless, the Executive Committee shall not have the power to approve any transactions in which members of the Executive Committee or any other person may have a conflict of interest (as defined in the notification of the SEC) with the Company. In such event, the Executive Committee must present the transaction to the Board and/or the shareholders for approval in accordance with the relevant articles, notifications and laws.

2) Audit Committee

The term of Directorship of the chairman and members of the Audit Committee is three years from the date of their appointment. Any retiring member of the Audit Committee may be re-elected. Where a Director's office in the Audit Committee is vacated by reason other than retirement, the Board shall elect a sufficiently qualified candidate to ensure that the requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time as the vacating Director was entitled to remain in office.

Scope of power, duties and responsibility of the Audit Committee

- The Audit Committee shall ensure that our financial statements are complete and accurate;
- The Audit Committee shall ensure that we have implemented appropriate and efficient internal controls and audit systems, and that the Internal Audit Bureau is independent. It shall also be responsible for the approval of the appointment, transfer or termination of the Chief of the Internal Audit Bureau, or any other unit responsible for internal audit;
- The Audit Committee shall ensure that we comply with securities and exchange laws, regulations of the SET and laws relating to our business operations;
- The Audit Committee shall recruit and nominate an independent third-party as our auditor, determine the auditor's fees and hold at least one meeting per year with the auditor, without the participation of the management;
- The Audit Committee shall ensure that our connected transactions, or transactions that may result in conflicts of interest, are conducted in compliance with the law and rules of the SET, and shall ensure that such transactions are reasonable and in our best interests;
- The report of the Audit Committee disclosed in the annual report of the Company will be signed by the Chairman of the Audit Committee and will consist of the following information:
 - (1) The opinion regarding the accuracy, completeness, and credibility of the financial statements.
 - (2) The opinion regarding the adequacy of the internal control of the Company.
 - (3) The opinion regarding the compliance of the Securities Act, regulations of the Stock Exchange of Thailand or the laws related to the business of the Company.
 - (4) The opinion regarding the appropriateness of the auditor.
 - (5) The opinion regarding the conflicts of interest.
 - (6) The number of meetings of the Audit Committee and the attendance of each auditor thereat.
 - (7) The opinion or the general remarks arising from the Audit Committee's compliance with the charter of the Audit Committee.
 - (8) Other transactions that the shareholders and investors should be informed about regarding the duties and responsibilities of the Board of Directors.
- if the Audit Committee, in the course of their duties, finds or is suspicious of one of the following transactions or actions which has significantly affected our financial standing and operating results, the Audit Committee shall report such transaction or action to the Board such that the relevant rectifications can be made:
 - (1) A transaction resulting in a conflict of interest;
 - (2) Fraud or any major irregularity or defect in our internal control system; or
 - (3) A violation of securities and exchange laws, regulations of the SET and the laws relating to our business.

If the Board or Management fails to rectify the problem within the time specified, any member of the Audit Committee may make a report to the SEC or the SET; and

- The Audit Committee shall perform any other activities as designated by the Board with the Audit Committee's approval.

3) The Nomination and Remuneration Committee

The term of membership of the chairman and members of the Nomination and Remuneration Committee is three years from the date of their appointment. Any retiring member of the Nomination and Remuneration Committee may be re-elected. In the event that a Director's office is vacated due to reasons other than retirement, the Board shall elect a sufficiently qualified candidate such that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power, duties and responsibilities of the Nomination and Remuneration Committee

- The Nomination and Remuneration Committee shall review our business organization and the qualifications of our Directors and Chief Executive Officer in accordance with our business requirements;
- The Nomination and Remuneration Committee shall nominate only persons whose qualifications are appropriate for holding office as Directors and our Chief Executive Officer, and shall set up transparent nomination criteria and procedures for such persons. The nominations shall be presented at a Board meeting and/or a shareholders' meeting for approval;
- The Nomination and Remuneration Committee shall implement procedures and rules to ensure that fair and reasonable remuneration, both in cash and in kind, will be granted to our Directors and the Chief Executive Officer. The Nomination and Remuneration Committee shall propose such remuneration at a Board meeting and/or a shareholders' meeting for approval;
- The Nomination and Remuneration Committee shall report to the Board on its performance and shall prepare a Nomination and Remuneration Committee's report which will be disclosed in our annual report. The report must be signed by the chairman of the Nomination and Remuneration Committee;
- The Nomination and Remuneration Committee shall conduct performance evaluations and prepare an evaluation report for the Board; and
- The Nomination and Remuneration Committee shall perform any other activities as designated by the Board.

4) Risk Management Committee

The term of membership of the chairman and members of the Risk Management Committee is three years from the date of their appointment. Any retiring member of the Risk Management Committee may be re-elected. In the event that a Director's office is vacated due to reasons other than retirement, the Board shall elect a sufficiently qualified candidate such that the quorum requirements prescribed by the Board are met. The person so appointed shall remain in office for the same period of time that the vacating Director was entitled to remain in office.

Scope of power, duties and responsibilities of the Risk Management Committee

- Before making management policy proposals to the Board for approval, the Risk Management Committee shall consider our risk management policies in light of changes in our business and circumstances;
- The Risk Management Committee shall determine business strategies in accordance with our risk management policies;
- The Risk Management Committee shall approve risk management indicators;
- The Risk Management Committee shall monitor management's compliance with our risk management policies and control the efficiency of risk management;
- The Risk Management Committee shall monitor the sufficiency of resources such as staff and systems for risk management;
- The Risk Management Committee shall implement risk management procedures and rules for evaluating significant transactions before such transactions are presented to the Board and relevant committees for approval;
- The Risk Management Committee shall monitor and report our risk status to the Board and the Audit Committee;

- The Risk Management Committee shall integrate corporate governance, risk management and legal compliance in order to achieve integrity-driven operations;
- The Risk Management Committee shall set up a working team as may be appropriate; and
- The Risk Management Committee shall perform any other activities as designated by the Board.

14. Professional Development of Directors and Executives

- (1) The Company promotes and facilitates training for professional development and with a view to training all relevant directors, including directors who are members of numerous Subcommittees, so as to continuously improve work operations.
- (2) The Corporate Secretary shall arrange for the preparation of a manual for the directors as well as the determination of rules relevant to the disclosure of information, background, securities holding proportion, changes to securities holding etc., which shall be submitted in the event of changes to the directors. The Corporate Secretary will, furthermore, invite the new directors to visit the Company's factory with a view to introducing them to the nature of the business as well as to the guidelines for business operations.
- (3) The Company requires that the Chief Executive Officer prepare a report on the plans for the development and succession of work which the Chief Executive Officer and Managing Director have prepared in the event that they are unable to perform such work themselves. The Company has put in place a structure for developing the Executives, whereby the Chief Executive Officer is assigned to give an annual report on the acts undertaken during the year, which will then be considered in conjunction with the plan for work succession.

15. Corporate Social Responsibility Policy

1) Fair Business Operations

The Company places emphasis on conducting its business within the framework of fair and honest competition in compliance with the relevant laws and regulations, and has established the following practice guidelines. The Company shall:

- Encourage its employees to recognize the importance of compliance with competition laws and the principles of fair competition
- Support various public policies which promote fair competition; and
- Undertake acts in a manner which is compliant with competition laws and requirements, as well as cooperate with government officials

2) Anti-corruption

The Company endeavors to conduct its business in a transparent manner, while adhering to principles of good corporate governance and taking into consideration the interests of the interested parties in all respects. It has established anti-corruption guidelines and also supports activities which promote and encourage the executives and employees to comply with the applicable laws and regulations, whereby the practice guidelines are as follows:

- The Company must instill right practices, values and perspectives within its employees to comply with the rules and regulations in an honest manner;
- The Company shall undertake steps to ensure that its internal control system is efficient, and that the reviewing thereof and the balance of power is appropriate;
- All directors, executives and employees of the Company are prohibited from undertaking any act which is deemed to be soliciting or accepting assets or any other benefits implied as motivation for performing their duties or refraining from the performance thereof in a dishonest manner;
- All directors, executives and employees of the Company are prohibited from undertaking any act which is deemed to be the offering of assets or any other benefits implied as motivation for performing their duties or refraining from the performance thereof in a dishonest manner.

3) The Process for assessing the risk from corruption

- The internal audit and the risk management department recommend continuously monitoring and examining the accounts annually in accordance with the opinion of the Audit Committee and reporting material issues and suggestions to the Audit Committee.
- The risk management department is responsible for continuous testing and risk assessment
- of corruption in order to implement anti-corruption measures effectively. These measures have to be reviewed regularly and the assessment results have to be reported to the Risk Management Committee and also to the Board of Directors regularly.
- If it is found that the Company operations do not comply with the anti-corruption policy, the Audit Committee will report this to the Board of Directors to improve within the appropriate timeline.

4) Respecting human rights and fair treatment towards labor

The Company's policy is to supervise and treat all employees fairly, whereby the Company shall not discriminate against individuals on the basis of similarities or differences in race, religion, sex, age or any other characteristics. Furthermore, the Company has a policy to strictly comply with the labor protection laws.

5) Community or social development

The Company recognizes the importance of taking part in corporate social responsibility and has, therefore, continuously organized projects to help and develop society, and primarily focuses on donating funds and promoting education, supporting religion, and helping and attending community activities on occasions.

6) Environmental conservation

- The Company gives importance to the potential impacts of the manufacturing processes on the environment and its policy is to strictly comply with the applicable rules, regulations and standards with respect to the environment. In addition, the Company plans to promote ideas for making use of waste produced during the manufacturing process in order to increase their value.
- The Company has a policy to educate and train employees in environment matters annually so that every level of employee understands the impact of pollution in all aspects and to teach good management policies to reduce cost, expense and environmental problems for the sustainable growth of the Company.

7) Innovations and the diffusion of innovations obtained from work operations involving responsibility towards society, the environment and interested parties

The Company aims to support sugar cane farmers with a view to encouraging their progress and stability alongside the Company. The Company has therefore continuously organized research projects for furthering the potential of the sugar cane farmers.

8) Non violation of Intellectual Property Rights or Copyrights of others

The Company has a policy of non-violation of Intellectual Property Rights or Copyrights, such as non-violation of computer crime laws, complying with copyrights of software in both work or in non-work related issues and complying with Intellectual Property Rights, Copyright law and related laws and regulations.

Supervising the use of Internal Information

We have implemented the following policy prohibiting Directors and Executives from using internal, non-public information for personal benefit and for securities trading:

- (1) We informed our Directors, Executives and employees holding managerial positions, including their equivalent or higher in the accounting and finance departments, of their obligation to prepare and submit reports containing information on securities in their possession, including securities in the possession of their spouse and children, to the Office of the SEC pursuant to Section 59 of the Securities Act. They have also been informed of the corresponding penalties set out in Section 275 of the Securities Act.

- (2) Our Directors, Executives and persons holding managerial positions, including their equivalent or higher in the accounting and finance departments, are to prepare and submit reports containing information on securities in their possession, including securities in the possession of their spouse and child, to the Company Secretary. The report shall be prepared and submitted within thirty days of the date of appointment of the Director or Executive. Any change in possession of securities is to be reported within three working days from the date of the purchase, sale, transfer or receipt of securities.
- (3) We require our Directors, Executives and persons holding managerial positions, including their equivalent or higher in the accounting and finance departments and relevant operators who have access to internal information which may materially affect our share price, to abstain from trading in our securities for a specified period before our financial statements or our status or financial condition is disclosed, or until such information has been disclosed to the public. We will issue a notification in writing to our Directors, Executives and persons holding managerial positions, including their equivalent or higher in the accounting and finance departments, at least thirty days prior to the disclosure of such information to the public. Such material information shall also not be disclosed to any third party.

Should there be a breach of the abovementioned rules, the disciplinary sanctions imposed may vary from a written reprimand to wage reduction, suspension of work or termination of employment. The severity of the sanction imposed shall be determined based on whether the breach was intentional and the severity of the misconduct.

Remuneration for the External Audit

1) Audit Fee

The Company and its subsidiaries have paid audit fees as follows:

- The Company's external audit (Miss Vilailak Laohasrisakul) in the last year total 0 baht.
- The audit company (EY Office Ltd.) person and businesses related to the external auditor and the audit company in the last year.

No.	The Company and its subsidiaries	2017	2018	2019
1	Kaset Thai International Sugar Corporation Pcl. (KTIS)	1,240,000	1,240,000	1,290,000
2	Thai Identity Sugar Factory Co., Ltd.(TIS)	430,000	430,000	520,000
3	Environment Pulp and Paper Co., Ltd.(EPPCO)	250,000	250,000	360,000
4	KTIS Bioethanol Co.,Ltd. (KTBE)	340,000	340,000	390,000
5	Kaset Thai Bio Power Co., Ltd. (KTBP)	250,000	250,000	250,000
6	Thaiekaluck Power Co., Ltd.(TEP)	150,000	150,000	250,000
7	Ruampol Bio Power Co., Ltd.(RPBP)	150,000	150,000	250,000
8	Permsinpattana Co., Ltd.(PSP)	35,000	35,000	35,000
9	Sapsirikaset Co., Ltd.(SSK)	47,000	47,000	47,000

No.	The Company and its subsidiaries	2017	2018	2019
10	Environment Pulp and Packaging Co., Ltd.(EPAC)	35,000	35,000	35,000
11	Lopburi Bioethanol Co., Ltd.(LBE)	35,000	35,000	35,000
12	Lopburi Biopower Co., Ltd.(LBP)	35,000	35,000	35,000
13	KTIS Bio Energy Co., Ltd.(KBE)	35,000	35,000	35,000
14	KTIS Biogas Power Co., Ltd.(KBGP)	35,000	35,000	35,000
15	Kasetthai Wiwat Co., Ltd.(KTW)	100,000	100,000	100,000
16	KTIS Research and Development Co.,Ltd (KTIS R&D)	38,000	38,000	38,000
17	KTIS Bio Fertiliser Co.,Ltd (KTBF)	45,000	45,000	50,000
Total		3,250,000	3,250,000	3,755,000

2) Non-audit fee

No.	The Company and its subsidiaries .	non-audit service	2018 Remuneration for other services (Baht)		non-audit service	2019 Remuneration for other services (Baht)	
			The paid during the fiscal year.	The paid in the future.		The paid during the fiscal year.	The paid in the future.
1	Kaset Thai Bio Power Co., Ltd. (KTBP)	Review BOI (in Baht)	50,000	-	Review BOI (in Baht)	57,500	-
2	Thai Ekarak Power Co.,Ltd TEP)	"	50,000	-	"	57,500	-
3	Ruampol Bio Power Co., Ltd.(RPBP)	"	50,000	-	"	57,500	-
Total			150,000	-	"	172,500	-

Corporate Governance Code : CG Code

The Board of Directors reviewed and acknowledged CG Code in the Board Meeting No. 4/2019 dated May 13, 2019 and recognized the roles and duties of the governing body in creating sustainable value for the Company and overview evaluation of CG Code which some practices had been added in the Company CG Policy as well as considered the explanation, assessment and summary of the unimplemented items of CG Code in details from the Company Secretary.

Corporate Social Responsibility

More than 5 decades of integrated sugar business, KTIS group has consistently applied the good corporate governance policy and the corporate social responsibility (CSR) based on the stakeholders' benefits. The Company, as a community member, pays attention to the environmental surroundings of local communities by caring, engaging and creating shared value between business, community, society and good environment so that they can grow steadily, consistently and sustainably.

KTIS's Zero Waste Management

KTIS group has applied CSR in its production processes (in-process CSR) and adopted the principle of zero waste management for all production processes by recognizing the value of resources and utilizing them at best. Also giving priority to the eco-friendly process, recycling wastes to be more valuable by-products which will optimize existing resources at most benefits and raise the price of agricultural crops as well.

KTIS group's in-process CSR activities start from the development of the sugarcane quality, sharing the knowledge of successful sugarcane management to the contracted farmers through programs such as the cane farmers' school program, the village's fresh cane program (green and no fire village), the village's rich soil program, the village temple school and sugar factory project and the integrated sugarcane farming educational park etc. These programs are designed to train the farmers about organic farming, chemical-free approaches, use of parasitic wasps for biological pest control, harvesting techniques, the benefits of fresh cane harvesting over burnt cane harvesting, ratoon maintenance for multiple cropping, trash tillage to enrich the soil and reduce the need for fertilizers. Moreover KTIS set up "The Next Gen Cane Farmer" Project to encourage the next generation cane farmers to succeed their families' cane farming business.



**Demonstration of sugarcane planting
by Shute Planter**



**Agricultural machinery demonstration
at sugarcane field**



**Agricultural machinery demonstration
at sugarcane field**

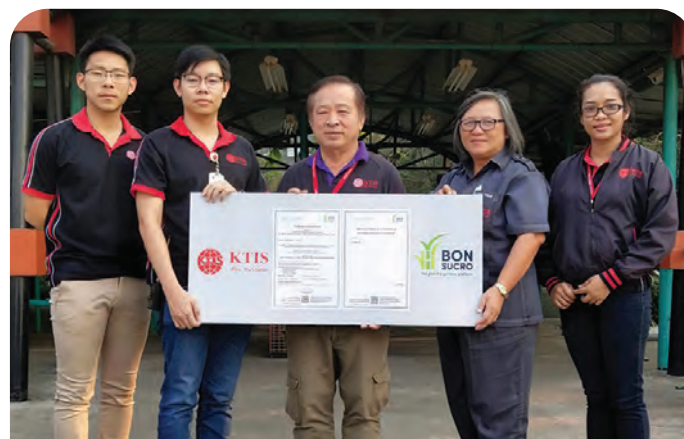


**Agricultural machinery demonstration and sugarcane
breeding Lesson at Sustainable and Integrated Cane
Farming Education Park**

KTIS group has also modified the advanced sugarcane farming techniques called “5 step plan+2” and agricultural machineries from Australia and applied to be suitable for Thai terrain and climate such as sonic planters machinery, shute planter machinery, cultivating and fertilizer feeding machinery (CRB, MPI), cane harvesting machinery etc. Contracted farmers are encouraged to use these agricultural machines to reduce costs, increase productivity and solve labor shortage problem.

For the water source development, the movable dripping irrigation system has been developed by KTIS group to improve the efficiency of crop water management. The device has hose that can be reeled and moved to different areas of the cane field. Moreover, solar water pumps are developed and used for sugarcane farm irrigation, which help reduce fuel costs significantly. In 2017 KTIS group cooperated with the government sector and cane farmers in The Groundwater Drilling Project in order to service the sustainable and concrete solutions as drought management to provide cane farmers with sufficient water for personal and agriculture usage throughout the year. Such irrigation system will utilize water at most.

Having worked to continuously improve the three pillars of sustainability: economic, social and environmental viability, in 2019 KTIS group therefore becomes the first SET-listed company with certified Bonsucro Certification, which is the standard used to demonstrate sustainability in the production of sugarcane and its derived products. Alongside Bonsucro, KTIS group additionally achieves all requirements and becomes a partner with VIVE, which is a global voluntary, continuous improvement sustainability program for ingredient supply chains, covering all operations and activities for producers through to end users including such stakeholders as community, investors, customers, suppliers, employees, cane farmers and shareholders, that have a bearing on sustainability.



KTIS and Bonsucro certification

The Company continues to develop innovations that enhance its work processes for valuable contribution to the society and satisfy the needs of every customer segment. Last year KTIS group started producing the Japanese-standard liquid sucrose and super refined sugar production to serve the food and beverage industry and other clients for premium-grade sugar.

Molasses is one of the by-products from the sugar production and can be processed into ethanol which has multiple usages. Energy ethanol is blended with petrol to produce gasohol which is an alternative clean energy, reduces pollution, and decrease carbon emission which is a major cause of global warming. Industrial-grade ethanol is used as a cosmetic and pharmaceutical ingredient. Molasses is also used in the food industry as a raw material for the production of dark soy sauce, monosodium glutamate, animal feeds, etc.

Bagasse is another by-product from the sugar production process and can be used as a material for producing bleached pulp (100% bagasse) which is environmentally friendly and can save up to 32 million trees from being cut each year. As no chlorine (which causes cancer) is used in the pulp bleaching process, the Company's bleached bagasse pulp is the first pulp in Thailand that received the ISO 22000, “GMP” and “HACCP” food safety accreditations. Food containers (molded pulp) which are made of the bleached pulp (100% bagasse) are disposable and eco-friendly and are alternatives to foam containers. Bagasse is extracted into cellulose powder which is an ingredient for foods such as fiber cookies, healthy sausages and healthy ice cream.

Bagasse can also be used as fuel in biomass power plants to generate steam and electricity for the sugar plants and other factories of KTIS group. Excess electricity is sold to the Provincial Electricity Authority (PEA) and the Electricity Generating Authority of Thailand (EGAT) and thus is passed on to the people in provincial areas, helping them to have stable electricity in their household and for better standard of living. Besides, the biomass power which uses bagasse as feedstock is considered clean energy and can help reduce carbon emission.

Vinasse is a kind of waste derived from the ethanol production process. To optimize the resource utilization, vinasse is used in the production of biogas which is a fuel for ethanol plants.

Filter cake, sludge and vinasse, which are waste from the production process, contain valuable organic matters and can be converted into soil conditioner that is free of soil-degrading chemical residues and help improve the soil quality and the crop productivity. Through this cycle, the waste is utilized and the value is returned to cane farmers.

Under the current trend of globalization, KTIS group aims significantly to research and develop new technologies and innovations and integrate these advancements into our business continuously. Also educating these knowledge through various channels to enhance sugarcane farmers community according to Government policy of Thailand Industry 4.0 in the development of innovation and technology to benefit all parties in order to improve the efficiency and effectiveness of the production process, reduce costs and wastes, increase cane yield of contracted farmers. Thus, the business organization and community will be able to live together happily, prosperously and sustainably.

KTIS's Research and development

In 2015, KTIS group established a subsidiary named KTIS Research and Development Co., Ltd. (KTRD) to support KTIS's businesses, and its growth aspirations, efficiency and sustainability. Since the year of establishment, KTRD has signed 10 Memoranda of Understanding (MoU) with 10 leading research and development institutions, specifically King Mongkut's University of Technology Thonburi, Chiang Mai University, Naresuan University, Thailand Institute of Scientific and Technological Research (TISTR), Khon Kaen University, Kasetsart University, Global Green Chemicals Public Company Limited, PTT Public Company Limited, and Thammasat University, with which conducted 6 research and development projects in 2019.



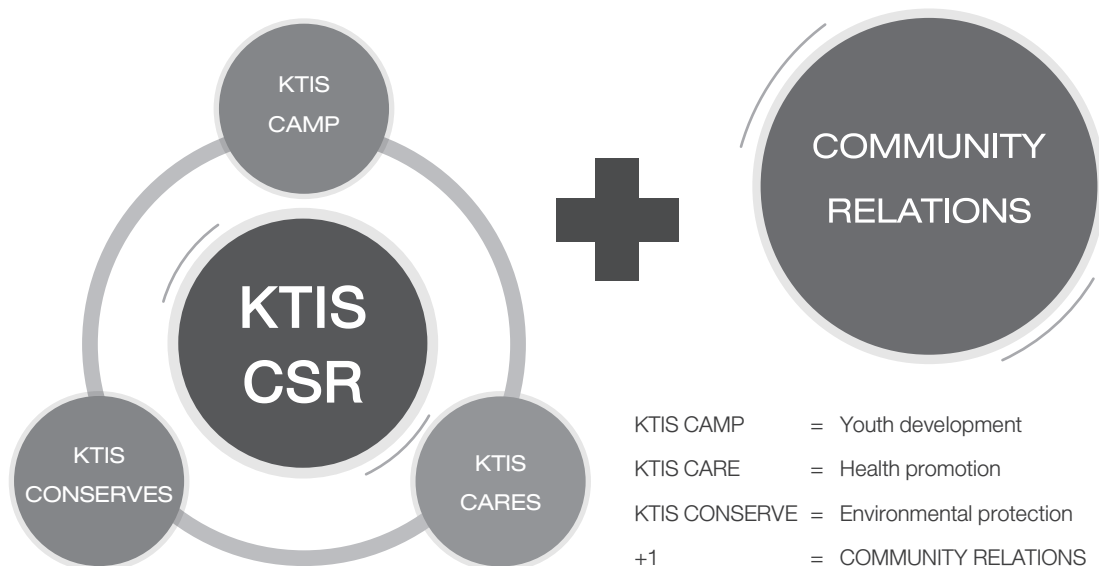
KTIS signed MOU with Thammasat University

Additionally, KTIS group signed a Memorandum of Understanding (MOU) with the Office of the Cane and Sugar Board (OCSB), the King Mongkut's University of Technology North Bangkok (KMUTNB), and Sugarcane Farmers Association Zone 11 Nakhonsawan, under "Increase in Sugarcane productivity and move towards Smart Farming" project, to encourage cane farmers to adopt new technology to boost sugarcane production and reduce costs in accordance to KTIS's intention of sustainable growth.



KTIS saves the world: Lovely Earth, Lively Community with “KTIS 3C+1”

In addition to the in-process CSR, KTIS group has continuously arranged after-process CSR activities to share knowledge, strengthen relationship between the organization and the local communities. This is driven by the ideology of “mutual growth of industry, environment and community” for the benefits of the society at last. Since 2016, KTIS focused its CSR efforts on the youth, health and environmental development under the “KTIS saves the world: Lovely Earth, Lively Community” project with the guiding principle of KTIS 3C+1 as illustrated below:





With regard to community relations, KTIS group continues to have good relationship with the local communities and regularly meet with community leaders. In addition, the group has organized and participated in a number of activities that help strengthen the relationship such as sports activities and community landscape improvement projects etc.

Highlights of CSR Activities and Projects of KTIS

Sugarcane Farmers' School

KTIS group intends to promote sustainable development and growth through the education of farmers and thus has established a farmers' school project which is run on an ongoing basis to keep the farmers acquaint with new and emerging sugarcane farming techniques and approaches. The farmers' school is a forum for exchanging knowledge about soil preparation, demonstrating machinery utilization and periodic fertilization techniques by field experts. Learning is practiced in the sugarcane field so that the farmers will gain practical experience and share knowledge together.



Sugarcane Farmers School



Fresh Cane Village Project

Fresh Cane Village Project (Green and No Fire Village)

KTIS group believes that true sustainability will come from all concerned parties, farmers, factories and the government agencies, so Fresh Cane Village Project (Green and No Fire Village) was established. All parties would jointly encourage sugarcane farmers in the village to cut fresh cane not less than 80% of projected canes. Cutting fresh sugarcane is a natural conservation, reduce pollution, and maintain good environment and soil surface for next crop cultivation. It also increases yield of sugarcane. This project will get the participation from all sugarcane farmers, community and government agencies to prevent burning sugarcane in the fields. This project has been performed successfully and continuously. At present, there are 30 villages participating in the project and targets to expand to 50 30 villages next year.



Thai Identity Sugar Factory Co., Ltd. of KTIS group received Factory Award
at Good Level and “Conservative Cane for the World” Award

The Village with Good and Organic Matters in Soil Project

After the Fresh Cane Areas Project that burnt canes was controlled successfully by the community and sugarcane farmers, the Village with Good and Organic Matters in Soil Project is set up for following operation. Before maintenance of sugarcane ratoon or new planting, the plowing with cane trashes left from fresh cane instead of burnt cane harvesting will derive higher organic matters to increase nutrient to soil. Such project will increase cane yield per area, protects the environment, increase natural pest enemies and reduce the use of fertilizers that will lead to lower production costs.

Village, Temple, School And Sugar Factory Project

Since 2016, KTIS group has organized the cooperation project in planting sugarcane between village, temple, school and sugar factory in their areas with the objectives to educate sugarcane planting technique for students, community and local people. The temples and schools in program will plant sugarcane and be the education center in there areas. The sugar factory and its contracted sugarcane farmers join with the village leaders and villagers to provide sugarcane variety, fertilizer, insecticide, and agriculture equipment to the projected areas under the operation of school teachers and students. Finally, the revenue from selling sugarcane yeild will return to the temples and schools for religion purposes and student scholarships. The officers of KTIS group will train and look after these activities very closely.



Village, Temple, School And Sugar Factory Project

Sustainable Learning Park of Sugarcane Farming Project

KTIS group aims to support the sugarcane farmers for successful and sustainable operation, thus established the Sustainable Learning Park of Sugarcane Farming Project in order to educate sugarcane farmers about sugarcane production technique of KTIS group, called “5 Step Plan + 2” which will boost sugarcane yield per area, reduce costs by utilizing modern agricultural machinery in sugarcane farming so that the farmers will have sustainable earning and creates successors for sugarcane farming. KTIS group will introduce knowledge of production plan, knowledge, proportion of sugarcane planting, soil preparation, cultivating technique, maintenance technique, harvesting technique



KTIS and Sugarcane Farmers Association Zone 11 welcomed NatureWorks, PTTGC and GGC at the Sustainable Learning Park

as well as cane trashes storage in fields. Management of each stage of sugarcane production will depend on the factors, processes and agricultural equipment at the right time so that the control in time and quality standard should be carefully practiced

“The Next Gen Cane Farmer” Project

KTIS set up the first “The Next Gen Cane Farmer” project at Thai Identity Sugar Factory in Uttaradit, project to encourage the next generation cane farmers to succeed their families’ cane farming business. The program includes basic theory of sugarcane farming and workshops, the concept of Smart Farming 4.0, adoption of new technologies in cane farming, farm management, as well as knowledge and experience sharing for the success in the sugarcane cultivation.



“The Next Gen Cane Farmer” Project

The prevent and solve drug problems in the workplace Project

KTIS group signed the Memorandum of Understanding (MOU) on cooperation for the prevention and resolution of drug problems under the “prevent and solve drug problems in the workplace” project with Provincial Industry Offices both in Uttaradit and Nakhonsawan. The agreement aims to campaign, create awareness, prevent and resolve drug problems in the workplace following government policies.



KTIS group received the Standard on Prevention and Solution to Drug Problems Award



Sports as a tool to prevent drug use



KTIS group signed MOU with Provincial Industry Offices on cooperation for the prevention and resolution of drug problems in workplace

Work Safety Week 2019

KTIS group realizes the importance of employee safety so it has organized safety activities in 2019 to promote and raise awareness of safety, health and working environment and review the unsafe operation. The activity will create cooperation in safety working condition, reduce risk of work injury to be minimal and achieves the aims of KTIS group that wants to create sustainable work safety.



In addition to the above projects, the KTIS group also sponsors activities in order to develop and maintain good relationships and quality of life for the communities nearby.

- Dr. Darat Siriviriyakul Vibhatakalasa, Deputy to Chief Executive Officer- KTIS group, is the chairman to offer a robe for the monks to take as a discarded cloth, at Wat Huay duk in Nakhonsawan.



- KTIS group participated in To Be Number 1 Club of EPPCO in quarterly tree planting activity. KTIS Group realizes and acknowledges the problems of global warming and air pollution conditions so that it encourages planting trees to increase more green areas within the factories, improving landscape and creating a natural scenery. It also encourages employees to participate in loving of nature and environment as well.



Quarterly Tree Planting Activity



KTIS Group and GKBI held an activity on World Environment Day by growing trees

- KTIS group in cooperation with GGC KTIS Bio Industrial Co.,Ltd. (GKBI), the joint venture of KTIS group and Global Green Chemicals Plc (GGC) held an activity on World Environment Day by growing trees across the ethanol factory, Tambon Nongpo, Amphur Thakee, Nakhonsawan Province, in order to encourage employees to do good activities together, as well as to stimulate the awareness of air pollution impacts, create a sense of participation in increasing green space and natural environment which could lessen global warming.

- KTIS group conducted “stop the burn” campaign to stop sugarcane burning, reduce smog, lessen global warming, save environment and reduce the emission of fine particulate matter (PM2.5) according to government policies, by advertising via posters placed in front of KTIS group’s local offices.



“stop the burn” posters placed in front of KTIS group’s offices



KTIS Group welcomed Nakhonsawan Governor and government agencies on their factory visit following measures of the prevention and elimination of smog in workplace

- Provincial Industry Office at Nakhonsawan to organize the CSR industry project for the second year to raise better economy of the community, create jobs, create opportunities and income as well as create good relationship between the factories and local entrepreneurs according to the policy of the Ministry of Industry. KTIS Group has opened the area for the sale of SME and OTOP products at Kaset Thai International Sugar Corporation Pcl. (Branch 3), Amphur Muang, Nakhonsawan Province and Kaset Thai International Sugar Corporation Pcl., Amphur Thakee, Nakhonsawan Province.



- KTIS group in cooperation with Skilled-Labor Development Institutes Region 8 Nakhonsawan organized “KAIZEN” training course in order to develop potential and increase productivity for workers with good quality of life, enhancing national competitiveness in accordance to STEM Workforce towards SME 4.0. for the year 2019.



- Participation in activities and support funding and essential goods to the community in order to develop the community and organize activities such as the National Children's Day in 2019, Red Cross Fair, and events for elders.



National Children's Day



an event for elders



KTIS group supported
“Reduce garbage, Reduce global warming” project



- KTIS group, Sugarcane Farmers Association Zone 11, Office of Cane and Sugar Board, Thakee District Police Station, Thakee Municipality, and volunteers joined together on Street Big Cleaning Day in Thakee District.

- KTIS group donated blood to hospitals on “Give Blood Save Life” quarterly activity at KTIS Bangkok office, and KTIS’s factories in order to help people life in emergency cases.



- KTIS group supported and contributed to improve community facilities and assets in Nakornsawan and Uttaradit Province.



For more information about our CSR activities and the sustainability report, please visit our website at www.ktisgroup.com

Internal Control and Risk Management

Internal Control

KTIS group has applied the comprehensive internal control system under the principles of good Corporate Governance to control all operations so that they are transparent, fair, and reliable with the necessary balance of power for the maximization of the stakeholders' benefits. As an effective internal control system starts from good Corporate Governance, we have to be alert to all business risks in order to ensure the achievement of the business plan. KTIS group has established audit and control policies to be practiced by all operation levels

In 2018, the Audit Committee has assigned Internal Audit Team to assess company's internal control systems under the Annual Internal Control Assessment Form, which is guided by The Office of the Securities and the Exchange Commission and is in the framework of the Committee Of Sponsoring Organization Of The Treadway Commission (COSO), which consists of 5 composition and 17 sub-topics. The Board of Directors and the Audit Committee have reviewed the system and opined the current internal control is suitable to the business operation as follows :

1. Organizational Control and Environment

KTIS group focuses on good organizational structure and environment that are the important foundation of effective internal as follows:

- Establish clear policies, goals, and business direction that can be concretely assessed as the guidelines for operating and supervising the business to meet goals with regular monitoring. The benchmark of the goals with the actual process has been gradually made.
- Determine organizational structure facilitating operations, for example, separating the position of President from Chief Executive Officer for checks and balance as well as define that the company's directors shall consist of independent directors of not less than 1 of 3 directors and not less than 3 persons. Moreover, subsidiary committees are also established for considering, screening, and performing the operations as assigned by the company's directors.
- Communicate the Corporate Governance Policy and Code of Conduct and Business Ethics as well as performance monitoring in order to build good awareness and realization on performance of duties.
- Establish policies, and regulations in writing as well as determine job descriptions, work instructions, operating rules and regulations in writing covering suitable approval authority of each executive level

2. Risk Management Work

In order to ensure that the organizational objectives were practiced in all operations as well as significant risk managements are managed to be minimal or zero effect to its business performance, the Board of Directors has assigned the Risk Management Committee to govern corporate risk management and to be responsible for continuous improvement of the risk management policies and scopes.

The Risk Management Department sets up the risk management system which is standard and concrete practice according to the concepts of The Committee. The frame work applied to this process is COSO (The Committee of Sponsoring Organizations of the Treadway Commission's risk management concept. There is Operation Risk Management in every section that will be responsible for taking risk policies and scopes into practices, setting up action plans to ensure that all important risks are properly managed at acceptable level (Risk Appetite).

3. Management Control Activities

KTIS group pays attention on the importance of management control activities in each department, whereby the following actions are performed:

- Clearly determine the scope of authority approval at each managing level in writing. Accounting Department and Internal Audit Department check and audit the correctness of documentation procedures as approved.
- Specification the authority and functions under the good principles of internal control as: (1) approval persons, (2) accounting and information recording persons and (3) property and assets responsible persons for properly auditing.
- Establish the standard of internal control to be in line with the risk and the type of business, it is traceable especially the operation that is associated with significant risk, and to prevent and to mitigate mistake. The Internal Audit team shall inspect the operation to be in accordance with relevant regulation, work manual, annual internal audit. The purpose is to ensure that the operation will have enough internal control system and efficiently operates.
- Determine the internal audit in an organization through policy and regulation, and encourage all operation units to have Work Instructions in writing.
- To consider the approval of connected transactions, our company has to comply with the defined rules and regulations. For any significant transaction, the Audit Committee will deliberately check and give comments to be proposed to the Board of Directors for approval and disclosure in the Company's annual report. The consideration on connected transactions has been carefully considered at the ultimate benefits of our organization
- Assign the persons who are responsible for related laws and regulations.

4. Information and Communication

KTIS group focuses on the importance of careful performance based on the quality of sufficient information for making decisions as well as communication to related persons as follows:

- Provide and prepare important information sufficiently and completely to executive managers and the company's directors for making decisions as well as invite responsible executives and related persons to clarify the important issues at the Board of Directors Meeting.
- Compliance with the Accounting Standard as declared by the Federation of Accounting Professions for financial accounting systems and appropriateness for the company's business operation.
- Completely keep and categorize all documents supporting accounting records as well as determine the duration of document storage as defined by law.
- Perform the operations under the Computer-Related Offence Act by communicating to all employees for their knowledge and awareness of the subject matters and punishments under such act. Moreover, the Company has also stored information on computer traffic according with the Notifications of the Ministry of Information and Communication Technology.
- Provide information backup system under Disaster Recovery Plan (DRP) by preparing the work place and necessary computer devices for disaster situations.
- Publish important information via our company's website (www.ktisgroup.com) on a complete and timely basis.

5. Monitoring

KTIS group pays close attention to the monitoring system in order to ensure that our operations and internal control system have been performed efficiently for achieving the defined goals as follows:

- The company's directors attend the meetings for monitoring the management's performance and provide opinions and suggestions.
- The Audit Committee holds joint meetings with Independent Auditors, Accounting personnel, and Internal Audit team to verify financial statements and the internal control system. Regularly monitors the improvements and reports important issues to the Board of Directors during every quarter.
- The Risk Management Committee holds the meeting in every quarter to supervise and monitor the operations in compliance with the Risk Management Policy and Corporate Risk Profile, Key Risk Indicators (KRI) and Risk Management Plans. The risk assessment is regularly conducted and reported to Board of Directors and Audit Committee.
- Nomination and Remuneration Committee holds the meetings to consider recruiting persons with appropriate qualifications for being appointed as the company's directors as well as to consider the remuneration of directors to be proposed to the Board of Directors and the Shareholders Meeting for approval.
- The Internal Audit Department is able to audit and give opinions independently by reporting their performance to the Audit Committee directly and regularly for all quarters or reporting important issues once they have occurred.
- The Audit Committee considers and approves the internal audit plans by applying the principles of risk assessment levels. When the Internal Audit Department finds any important defect, such defect will be reported to executives who are responsible for such activity immediately. In addition, the Audit Committee will present such report to the executive management for acknowledgement or additional explanation in order to ensure that the company will achieve its objectives effectively.

Risk Management

The Board of Directors has assigned the Risk Management Committee to manage KTIS Group risks as a whole. In 2019, the Risk Management Committee has assessed the operation of risk management, the efficiency of management. The result is used to improve the policy and the frame work of risk management based on the frame work of COSO-ERM 2017: Enterprise Risk Management Integrating with Strategy and Performance and made to be suitable with work system and environment of the Company. Operation Risk Management Team has been operating risk management according to the determined policy and frame work, the team also implemented controlling measure to ensure that the major risk shall be controlled into the level of Risk Appetite, and to be consistent with the goal of the Company to ensure to all stakeholders that the business and other operation shall be consistent with the Company's objective.

In terms of governance in risk management, the Risk Management Committee reviews corporate risk profiles, key risk indicators, and risk management plans to ensure consistency with the business direction, corporate strategies and the changing environment. Monitoring and evaluating the results of risk management and reports the performance to the Board of Directors and the Audit Committee regularly.

Report of the Audit Committee

The audit committee of Kaset Thai International Sugar Corporation Public Company Limited composes of the independent directors who very well possess the variety of expertise and experience in the aspects of accounting, finance, economy, law, technology and business. In 2019, the audit committee directors are Mr. Krairit Nilkuha, the Chairman of the Audit Committee, Mr. T-rayooth Changpetch and Mr. Sathaporn Kotheeranurak, members of the Audit Committee. All of audit directors are not the directors of any subsidiary, and are qualified by the law and regulation. They also do not hold shares of the Company or hold shares of the Company not exceeding 0.1%, further they do not participate in the management of or work as the certified public accountant, the consultant or the trading partner of the Company or its subsidiary which is complying with the law and regulation.

The audit committee has been working as assigned by the board of directors and in accordance with the charter of the audit committee which conforms with the good practice of Securities and Exchanges Commission. The roles of the committee are to respond with the review of financial report, related transactions and internal audit and also includes the promotion and encouragement of the compliance with the good practice of the listed company to ensure the Company's good governance, the risk management and efficient internal control.

In 2019, the audit committee held 5 meetings and a meeting with certified public accounts without the attendance of any executive. The purpose of a meeting with certified public accounts is to independently discuss about important issues in the making of financial report and the disclosure for the benefit of consolidated financial report users, to acknowledge the audit result, the audited note and also problems during the operation of the audit. The summary of the issues that were considered by the audit committee in the passing year are as follows:

1. The review of the financial report

The audit committee has provided its opinion for the quarter and annual financial reports of 2019 ended on 30th September 2019 reviewed by the certified public accountants, and has audited as per the report of the certified public accountants. The committee was discussing with the certified public accountants, the executives and the internal audit office to ensure that the making of financial report conforms with Financial Reporting Standard and the sufficient and timely disclosure for the benefit of the investors and financial report users. The committee focused on the review of the accounting transactions, accounting changes and significant entries and also the appropriateness and the sufficiency of the disclosure. The consequence of the review is the committee opined that the financial reports made in 2019 by the Company is correct, appropriate, sufficient, reliable and conforming with general accounting standard.

2. Good governance

The directors and the executives emphasized on the management conforming the good governance and to assure shareholders, investors and all stakeholders and take into account the interest of all stakeholders. It also includes the promotion of activities to encourage and cultivate the compliance with the law and regulation to the executives and the staff. The mechanism of risk assessment for corruption was also implemented.

3. Risk management

The audit committee has reviewed the Company's risk management to ensure that the risk management committee and the executives have appropriately implemented risk management down to the operational level that comprehends significant internal and external risk factors, to ensure that there is a plan and risk management practice to serve as a fundamental data for internal audit. The audit committee opined that in 2019 the Company appropriately indicated the risk factors and the management has mitigated the risk into the acceptable level and conforming with current business operation.

4. The review of the internal control's efficiency

The audit committee, certified public accountants and the internal audit office have reviewed the sufficiency of internal control on quarterly basis. The Company has continuously followed the amendment and the revision as per the proposal in audit report, comments from certified public accountants and comments from the audit committee included the revision of the Company's internal control to ensure the appropriate level of conformity with changing operation. The audit committee opined that the Company's internal control is in the appropriate level conform with current operation. The management has also supported the continuous development of internal control using the principles and the practices of internal control as per the standard of The Committee of Sponsoring Organization of the Treadway Commission (COSO), to reasonably ensure that the operation shall achieve the objective of internal control. The summary of the annual components of internal control is exhibited in the Company's annual registration statement (56-1) and annual report (56-2) in the topic number 15 the internal control.

5. The review of related transactions

The audit committee has quarterly reviewed the disclosure of the Company's related transactions and its subsidiaries, which may contain the conflict of interest, is complied with the Notification of Board of Governors of the Stock Exchange of Thailand and the Notification of the Capital Market Supervisory Board. The committee opined that the transactions occurred in 2019 are the transactions for the benefit of the Company which had the arm-length trade conditions and price, were just and reasonable and shall not cause any manipulation of interest. The disclosure of such transactions in the financial report and its note is sufficient and completed and conforming with all relevant the Notification and practice of Board of Governors of the Stock Exchange of Thailand and of the Capital Market Supervisory Board.

6. The compliance with the rules and regulation of the Notification of Board of Governors of the Stock Exchange of Thailand and the Capital Market Supervisory Board, and with other law that relevant to the Company's business

The audit committee and the internal audit office has reviewed the compliance with the law, the review did not detect any significant issues that indicates that the Company has any practices that are contrary to law, rule, regulation and notification relevant to securities and exchange law, the Notification of the Capital Market Supervisory Board, and with other law that relevant to the Company's business

7. The monitor of internal audit

The audit committee has reviewed the annual audit plan, implementation of the plan, the internal audit office's report, and has provided the recommendation and followed the amendment of significant issues of the Company and its subsidiaries as per the comments from certified public accountants to create the good governance and sufficient internal control, has reviewed the annual budget of the internal audit office, its plan for staff training, the assessment of sufficient resources includes the approval of the assessment of the internal audit office's operation.

8. Nomination of Auditors in 2019

The audit committee has selected the certified public accountants for 2020 annual audit by considering the independence, experience, professional expertise, the sufficiency of the personnel to serve the Company, the appropriate service fee. The committee also considered the parity of the work quantity with the service fee, the qualification under the criterion of the Securities Exchange and no relationship with and/or not being interested party with the Company, its subsidiaries, executives, major shareholders or such person's related party in any manner that shall affect the independent operation, and appropriately work with the accounting standard.

Further, the audit committee has assessed their operation in 2019 on the whole committee basis compared with the audit committee's charter and good practices. The result of assessment shows that the audit committee operated under the scope of the duty and responsibility assigned by the board of directors. The operation was conducted by the sufficient knowledge, expertise, duty of care and independence for the interest of all stakeholder equally. The committee opined that the Company has the correct financial report, has the operation under the appropriate internal audit, has the risk management that controls the risk under the acceptable level and conforms with current business operation, has the compliance with all law, regulation and obligation that are relevant to the Company's business, has completely disclosed all transactions that may contain the conflict of interest, and has the operation that conforms with the good governance.



(Mr. Krairit Nilkuha)

Chairman of the Audit Committee

Related Parties Transactions

Related parties transactions as at 31 December 2017, 30 September 2018 and 30 September 2019 are as summarized below:

Related Person/ Companies	Nature of Relationship	Nature of Transaction
1. S.I. Property Co., Ltd. ("S.I. Property") (In the business of leasing property)	<ul style="list-style-type: none"> S.I. Property has 4 common directors with the Company: <ol style="list-style-type: none"> Mr.Nathapun Siriviriyakul Mr.Pricha Attavipach Miss Chua Eng Eng Mr.Sirapak Siriviriyakul Related companies hold shares of S.I. Property are Aekphol Sugar Co., Ltd. and SuebSiriSawat Co., Ltd. 	<p><u>Office Rental Expenses and Related Charges</u></p> <p>Rental expenses and related charges paid by TIS to S.I. Property.</p> <p><u>Accrued Expenses</u></p> <p>Accrued common area maintenance charge.</p> <p><u>Security Deposit Receivables</u></p> <p>Security deposit for the office space rent.</p> <p><u>Other Receivable</u></p> <p>Seminar Fee</p>
2. Aekphol Sugar Co., Ltd. ("APS") (In the business of leasing property)	<ul style="list-style-type: none"> APS has 4 common directors with the Company: <ol style="list-style-type: none"> Mr.Apichart Noochprayoon Mr.Nathapun Siriviriyakul Mrs.Darat Vibhatakalasa Mr.Sirapak Siriviriyakul Related companies hold shares of APS is Jaroon Hatai Ake Holding Co.Ltd 	<p><u>Office Rental Expenses and Related Charges</u></p> <p>Rental expenses and related charges paid by KTIS Group</p> <p><u>Accrued Expenses</u></p> <p>Accrued rental expense and related charges</p> <p><u>Vehicle</u></p> <p>EPPCO buy Pickup Truck.</p> <p><u>Security Deposit Receivable</u></p> <p>Security deposit for the office space rent.</p>
3. Thas Thai Business Co., Ltd. ("TT") (In the business of operating and establishing petrol stations)	<ul style="list-style-type: none"> Related companies hold shares in TT is Poompattana Business Co.Ltd 	<p><u>Purchase of Gasoline</u></p> <p>TT sold gasoline to the Company, TIS, KTBE ,EPPCO and KTBF</p> <p><u>Accounts Payable</u></p> <p>Accounts payable related to the purchase of gasoline by the Company, TIS, KTBE and EPPCO from TT.</p> <p><u>Purchase of Vehicle Tyres</u></p> <p>TT sold vehicle tyres to the Company and TIS.</p> <p><u>Accounts Payable</u></p> <p>Accounts payable related to the purchase of vehicle tyres the Company and TIS from TT.</p> <p><u>Revenue from Land Lease</u></p> <p>The Company and TIS leased landfor TT to operate its gas stations.</p>

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
1,723,433.11	1,224,430.18	1,395,953.61	<ul style="list-style-type: none"> S.I. Property is the owner of 444.18 sq.m office spaces at Liberty Plaza Building, 11th Fl., Thonglor, Sukhumvit 55 Rd., Klongton-Nua, Wattana, Bangkok. The rental rate is approximately THB 285 per sq.m. The rental terms and conditions are in line with market rates and practices.
2,220.42	-	2,470.50	
398,758.00	288,508.00	401,773.90	
19,642.00	-	-	
14,722,891.17	11,022,357.61	14,710,334.74	<ul style="list-style-type: none"> APS is the owner and the lessor of the office spaces of building located at 24 Vibhavadee-Rangsit Rd., Dindeang, Bangkok and on the 9-11 Fl. of its building located at 133 Vibhavadee-Rangsit Rd., Dindeang, Bangkok, to the Company, TIS, KTBE and EPPCO. The rental rates range from approximately THB180 - THB 230 per sq.m. The rental terms and conditions are in line with market rates and practices. EPPCO has buy Pickup Truck for use as operate area from APS. Prices, terms and conditions are in line with the market rates and practices.
112,799.60	131,958.92	132,418.86	
3,364.48	-	3,033,099.00	
3,033,099.00	3,033,099.00	-	
188,173,490.06	190,129,893.02	227,565,058.84	<ul style="list-style-type: none"> TT sold gasoline through gas stations located near the factories of companies in KTIS group. Selling price, terms and conditions are in line with market rates and practices. TT sold vehicle tyres to companies in KTIS group. Selling price, terms and conditions are in line with market rates and practices. TT operates gasoline station business of land located near their factories of companies in KTIS group, i.e.(1) land with total area of 5 rais, located in Nhong Po, Taklee, Nakornsawan, and (2) land with total area of 4 rais and 9 sq.wah, located in KhungTapao, Muang, Uttaradit. The lease fees, terms and conditions are more favorable than the market rates and practices.
15,320,233.88	5,500,522.32	4,128,745.79	
2,223,062.61	1,144,023.38	14,153,444.79	
352,501.00	-	469,540.00	
133,512.30	103,358.23	138,000.00	

Related Person/ Companies	Nature of Relationship	Nature of Transaction
		<p><u>Other Payable</u></p> <p>The Company and TIS received land lease fee in advance.</p> <p><u>Revenue from Sale of Materials</u></p> <p>The Company and TIS sold materials to TT.</p> <p><u>Other Receivable</u></p> <p>Accrued income of the Company from sale of materials.</p>
4. TISS Co., Ltd. ("TISS") (In the business of exporting sugar)	<ul style="list-style-type: none"> TISS has 4 common directors with the Company: <ol style="list-style-type: none"> (1) Mr. Prasert Siriviriyakul (2) Mr. Nathapun Siriviriyakul (3) Mr. Apichart Noochprayoon (4) Mr. Sirapak Siriviriyakul Related companies hold shares in TISS are KTIS and Aekphol Sugar Co., Ltd. 	<p><u>Export Expenses</u></p> <p>TISS handles the export of products produced by the Company and TIS. Most of the expenses are export agent fees, financial agent fees, export documentation expenses and custom clearance fees.</p> <p><u>Accrued Expenses</u></p> <p>Accrued expenses of TIS for export fees and service provided by TISS.</p> <p><u>Other Receivable</u></p> <ul style="list-style-type: none"> Sugar export fee which TISS must pay to TCSC. Seminar Fee <p><u>Other Receivable</u></p> <p>Revenue from sale of sugar export</p>
5. Siam P.P. International Co., Ltd. ("Siam PP") (In the business of producing and distributing lime)	<ul style="list-style-type: none"> Siam PP has 1 common director with the Company, namely <ol style="list-style-type: none"> (1) Mr. Nathapun Siriviriyakul. Related companies hold shares in Siam PP is Aekphol Sugar Co., Ltd. 	<p><u>Lime Trading</u></p> <p>Siam PP sold lime, a raw material used in the production of sugar and pulp, to the Company and EPPCO</p> <p><u>Accounts Payable</u></p> <p>Accounts payable associated with the purchase of lime by the Company and EPPCO from Siam PP.</p> <p><u>Other Receivable</u></p> <p>Seminar Fee</p>
6. RuamkijAnghong Warehouse Co., Ltd. ("Ruamkij") (In the business of leasing warehouses)	<ul style="list-style-type: none"> Ruamkij has 4 common directors with the Company: <ol style="list-style-type: none"> (1) Mrs. Darat Vibhatakalasa (2) Mr. Nathapun Siriviriyakul (3) Mr. Apichart Noochprayoon (4) Mr. Sirapak Siriviriyakul The Company's shareholders and related companies hold shares in Ruamkij is Aekphol Sugar Co., Ltd. and Ruamtoon Trading Nakhonsawan Co., Ltd. 	<p><u>Storage Service Fees</u></p> <p>The Company and TIS rent Ruamkij's warehouses.</p> <p><u>Accrued Expenses</u></p> <p>Accrued warehouse rental expenses of the Company and TIS payable to Ruamkij.</p> <p><u>Logistics Service Fee</u></p> <p>In addition to warehouse leasing, Ruamkij provides logistics services to the Company and TIS</p> <p><u>Accrued Expenses</u></p> <p>Accrued logistics service fees of the Company and TIS payable to Ruamkij.</p>

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
34,405.50	69,047.27	69,047.27	<ul style="list-style-type: none"> On 2 July 2012, the Company and TIS made a 30-year lease agreement with TT. Lease fee under the said agreement is THB 60,000 per year for each plot and the lease fee increase will be based on the 5-year average CPI during 2007 – 2011. The Company and TIS sold waste and materials to TT. Selling price, terms and conditions are in line with market rates and practices.
3,918.39	1,826.07	5,826.40	
18,409.45	-	-	
15,059,616.60	34,919,406.06	37,386,625.62	<ul style="list-style-type: none"> Under the Sugarcane and Sugar Act, sugar mills are prohibited from exporting sugar on their own accord. Therefore, companies in KTIS group have to use export services of TISS, an export company. In the sugar export process, the Company and its subsidiaries directly deal with their customers and TISS is responsible for handling cargo shipment and export documents only. Prices, fees, terms and conditions agreed with TISS are in line with the market rates and practices. Under the Sugarcane and Sugar Act, sugar mills are required to sell 400,000 tons of raw sugar to TCSC for export at the price determined by TCSC. Fee to be paid to TCSC is in line with the market rates and practices. TISS solicited packing credit facilities from commercial banks on behalf of the Company and TIS. TISS received revenue sale sugar from foreign buyers. And in the during to pay back KTIS
111,415.98	1,806,050.90	5,429,968.90	
60,132.19	301,174.53	50,063.26	
30,743.00	-	-	
-	8,437,316.08	8,237,967.13	
76,689,935.25	85,811,584.53	84,654,777.37	<ul style="list-style-type: none"> Siam PP sold lime to the Company and EPPCO. Selling price, terms and condition are in line with the Company's internal policies.
7,384,204.39	6,551,175.47	3,850,707.23	
13,126.00	-	-	
66,421,555.18	91,446,962.20	114,656,156.65	<ul style="list-style-type: none"> Ruamkij has 4 warehouses in (1) Pa Mok, Angthong and (3)Plakod, Angthong. for the purpose of sugar storage.Rental prices, terms and conditions are in line with the market rates and practices. The Company sold package to Ruamkij. Prices, terms and conditions are in line with the market rates and practices.
6,965,130.85	13,093,988.98	15,071,478.78	
106,360,176.61	142,126,789.15	114,306,470.25	
5,871,118.35	8,391,406.52	24,551,182.12	

Related Person/ Companies	Nature of Relationship	Nature of Transaction
		<p><u>Other Revenue</u></p> <p>Package</p> <p><u>Other Receivable</u></p> <p>Accrued income of the Company from sale of materials.</p>
7. RuamToonWarehouse Nakornsawan Co., Ltd. ("RuamToon") (In the business of leasing warehouses)	<ul style="list-style-type: none"> RuamToon has 1 common director with the Company, namely (1) Mr.Prasert Siriviriyakul The Company's shareholders and related companies hold shares in RuamToon are Jaroon Hatai Ake Holding Co.,Ltd and Aekphol Sugar Co., Ltd 	<p><u>Storage Service Fees</u></p> <p>The Company and TIS rent Ruamkij's warehouses.</p> <p><u>Accrued Expenses</u></p> <p>Accrued warehouse rental expenses of the Company and TIS payable to RuamToon.</p> <p><u>Logistics Service Fee</u></p> <p>In addition to warehouse leasing, RuamToon provides logistics services to the Company and TIS.</p> <p><u>Accrued Expenses</u></p> <p>Accrued logistics service fees of the Company and TIS payable to RuamToon.</p> <p><u>Other income</u></p> <p>Material cost and others</p> <p><u>Other Receivable</u></p> <p>Accrued income of the Company from sale of materials.</p> <p><u>Office expenses</u></p> <p>KTW pay office rent</p> <p><u>Accrued expenses – Rent</u></p> <p>KTW accrued office rental</p>
8. Thai Wisanu Nakornsawan Co., Ltd. ("Thai Wisanu") (In the hotel business)	<ul style="list-style-type: none"> Thai Wisanu has 4 common directors with the Company: (1) Mr.Parphan Siriviriyakul (2) Mrs. Darat Vibhatakalasa (3) Mr.Prasert Siriviriyakul (4) Mr. Nathapun Siriviriyakul Related companies hold shares in Thai Wisanu is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Hotel Fees</u></p> <p>Thai Wisanu is the owner of Grand Wisanu Plaza Hotel located at 26-28 Attakaweroad, Muang, Nakornsawan. The Company and TIS have occasionally used accomodations and services from the hotel.</p> <p><u>Accrued Expenses</u></p> <p>Fees for hotel rooms and services payable by the Company and TIS to Thai Wisanu.</p>
9. Weswisanu Co., Ltd. ("Weswisanu")(In the business of leasing hostels)	<ul style="list-style-type: none"> Thai WisanuNakornsawan Co., Ltd., a related party of the Company, hold shares in Weswisanu is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Employee Dormitory Rent</u></p> <p>KTBE and EPPCO have rented Weswisanu's dormitory for their employees.</p> <p><u>Accrued Expenses</u></p> <p>Accrued expenses of KTBE and EPPCO payable to Weswisanu for employee dormitory rent.</p>

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
27,000.00	8,500.00	-	
-	13,490.00	-	
40,123,867.43	46,546,209.29	67,357,775.00	<ul style="list-style-type: none"> The warehouses were rented from Ruamkij for the purpose of sugar storage. Rental prices, terms and conditions are in line with the market rates and practices RuamToon provides logistics service for the Company and its subsidiaries. Prices, terms and conditions are in line with the market rates and practices. RuamToon owners of the building area at 17, 19 Sukeemok Road, Tambon Pak Nam Pho, Amphoe Mueang, Nakhon Sawan, KTW leased office space at the rate of 2,000 Baht per month. Prices, terms and conditions are in line with the market rates and practices.
4,053,760.07	5,266,476.80	10,888,544.84	
17,012,910.72	20,870,448.72	24,031,569.50	
3,580,253.54	7,843,637.03	7,204,054.54	
-	-	33,000.00	
-	7,324.00	29,270.00	
24,000.00	18,000.00	24,000.00	
-	18,000.00	18,000.00	
1,269,454.61	391,149.53	342,697.20	<ul style="list-style-type: none"> Thai Wisanu is the owner of Grand Wisanu Plaza Hotel located at 26-28 Attakaweroad, Muang, Nakornsawan. The Company and TIS have occasionally used accommodations and services from the hotel. Prices, terms and condition are in line with market rates and practice.
139,400.00	100,450.00	61,000.00	
3,684,070.00	3,031,875.14	4,116,990.56	<ul style="list-style-type: none"> The Company and its subsidiaries rented dormitory from Weswisanu is the owner of the dormitory located in Nhong Po, Taklee, Nakornsawan, near the KTBE and EPPCO factories. At approximately THB 3,000 per room per month. The rent charged by Weswisanu, considering its return on assets, is not higher than other companies' rental rates in the dormitory rental business.
340,390.00	348,090.00	370,330.00	

Related Person/ Companies	Nature of Relationship	Nature of Transaction
10. SuebSiriSawat Co., Ltd. ("SuebSiri Sawat") (In the business of selling, purchasing and leasing property business)	<ul style="list-style-type: none"> Related companies hold shares in SuebSiriSawat is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Land Lease Expense</u></p> <p>KTBE pay for the land lease fees</p> <p><u>Prepaid Lease Fees</u></p> <p>Prepayment of the land lease fees</p> <p><u>Accrued expenses</u></p> <p>Land Lease Expenses</p>
11. RuamToon Trading Nakornsawan Co., Ltd. ("RuamToon Trading Nakornsawan") (In the transportation business)	<ul style="list-style-type: none"> RuamToon Trading has 1 common director with the Company, namely (1) Mr. Prasert Siriviriyakul. Related companies hold shares in RuamToon Trading is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Sugar Transportation Cost</u></p> <p>TIS engaged RuamToon Trading in the transportation of sugar to the warehouses.</p> <p><u>Accrued Transportation Expenses</u></p> <p>Sugar transportation expenses</p> <p><u>Other Revenue</u></p> <p>Compensation for damage of goods (sugar) paid to TIS</p> <p><u>Deposit – Transportation Cost</u></p> <p>Cost to guarantee the payment of compensation for damage during the transportation.</p> <p><u>Other Receivable</u></p> <p>Sugar and sugar change Fee</p>
12. Siri Charoen Export Co., Ltd. ("Siri Charoen") (Currently not involved in any business)	<ul style="list-style-type: none"> Siri Charoen has 1 common director with the Company, namely (1) Mr.Sirapak Siriviriyakul Directors and related parties hold shares in Siri Charoen is Jaroon Hatai Ake Holding Co.,Ltd and Akephol Co.,Ltd.,namely Mr.Sirapak Siriviriyakul 	<p><u>Loan Payable from Restructured Debts</u></p> <ul style="list-style-type: none"> TIS owed debts from loan SiriCharoen Interest expense Accrued interest payable

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
215,682.07	172,394.00	231,278.29	<ul style="list-style-type: none"> KTBE leases the land of 48 rai and 44 sq.wah in Nhong Po, Taklee, Nakornsawan, from SuebSiriSawat for use as a pathway to KTBE's plant. The price, terms and conditions are more favorable for KTBE than the market rates and conditions. On 2 July 2012, KTBE made a 30-year lease agreement with SuebSiriSawat. Lease fee under the said agreement is THB 200,000 per year for each plot and the lease fee increase will be based on the 5-year average CPI during 2007 – 2011. The right to renew the lease agreement for another 30-year term is also offered.
-	172,657.53	175,750.36	
114,684.93	-	-	
7,188,345.71	9,197,224.35	6,076,851.67	<ul style="list-style-type: none"> TIS engaged RuamToon Trading in the transportation of sugar to the warehouses. Prices, terms and conditions are in line with the market rates and practices. The Company deducts a deposit worth 10% of the transportation cost to guarantee the payment of compensation for damage during the transportation. The deposit is returned after the delivery of goods to the destination.
622,957.31	1,305,831.21	1,745,253.53	
10,310.75	8,841.12	8,336.45	
794,881.31	495,559.31	13,910.00	
1,692.50	3,277.50	-	
77,600,000.00	72,750,000.00	67,900,000.00	<ul style="list-style-type: none"> In the past, TIS owed money to financial institutions. From 2007 to 2008, as part of TIS's debt restructuring process, Siri Charoen, which has Mrs. NowaratWangpredalertkul, APS, and Mr. MontreeLekvichittada as major shareholders with the shareholdings of 62.5%, 25.0% and 12.4% respectively, acquired all of TIS's debts from the financial institutions. TIS and Siri Charoen entered into a debt restructuring contract, effective on 1 May 2013, which is the date that bankruptcy court has ordered TIS to exit the business rehabilitation plan whereas TIS must repay its outstanding principal and interest according to the 20-year installment repayment schedule. The interest charged by Siri Charoen on the outstanding and accrued interest equaled the average savings deposit interest rates of 3 banks, namely KASIKORN Bank Public Company Limited, Bangkok Bank Public Company Limited, and Krung Thai Bank Public Company Limited. On 25 December 2013, TIS and Siri Charoen agreed to amend the debt restructuring contract. Under the amended debt restructuring contract which has been effective since 31 December 2013, TIS agreed to pay the outstanding debts which include the principal of THB 97,000,000 and the accrued interest of THB 687,156,121.56 to Siri Charoen. The Company views that such amendment is favorable for the Company and reduce TIS' future debt repayment burden.
322,040.00	225,814.01	286,858.23	
568,641,531.06	538,867,345.07	509,154,203.30	

Related Person/ Companies	Nature of Relationship	Nature of Transaction
13. Ruampol Enterprise Co., Ltd ("RPE") (Formerly operated sugar production and trading business but currently is not in business operation.)	<ul style="list-style-type: none"> RPE has 6 common directors with the Company: <ol style="list-style-type: none"> Mr. Parphan Siriviriyakul Mr. Prasert Siriviriyakul Mr. Nathapun Siriviriyakul Mr. Sirivuthi Siamphakdee Mrs. Darat Vibhatakalasa Mr. Sirapak Siriviriyakul The Company's shareholders and related companies hold shares in RPE are Siricharoen Export Co.,Ltd and Jaroon hatai Ake Holding Co.,Ltd 	<p><u>Land Lease Expenses</u></p> <p>KTIS pay for the land lease</p> <p><u>Deposit – Factory Lease Fees</u></p> <p>Rental deposit for land and machinery of sugar factories.</p> <p><u>Prepaid Expenses</u></p> <p>Prepayment of the land, factory and machinery lease fees</p> <p><u>Debts under Financial Lease</u></p> <p>Debts under financial lease for building and machinery</p> <p><u>Accrued interest payable</u></p> <p>Interest payable on finance leases.</p> <p><u>Financial Costs</u></p> <p>Interest expenses under financial lease for building and machinery</p> <p><u>Land Lease Expenses</u></p> <p>KTIS leased land</p> <p><u>Electricity charge</u></p> <p>electricity charge</p> <p><u>Accrued expenses</u></p> <p>Costs payable from KTIS leased land.</p> <p><u>Prepaid Lease Fees</u></p> <p>Prepayment of the land lease fees</p> <p><u>Other Payable</u></p> <p>Electricity Development Fund</p>
14. SiriCharoen Sapraiwat Co., Ltd. ("SSPW") (operates hotel and resort business)	<ul style="list-style-type: none"> SSPW has 3 common directors with the Company: <ol style="list-style-type: none"> Mr. Pricha Attavipach Miss Chua EngEng Mr. Sirap Siriviriyakul The Company's shareholders and related companies hold shares in SSPW is Aekphol Sugar Co., Ltd. 	<p><u>Resort Fees</u></p> <p>Accommodation fees for rooms and services</p> <p><u>Accrued Expenses</u></p> <p>Accrued expenses of accommodation fees for rooms and services</p>
15. Nakornsawan Ruamtoonpattana Co., LTD ("Nakornsawan Ruamtoonpattana") (In the transportation business)	<ul style="list-style-type: none"> Nakornsawan Ruamtoonpattana has 1 common director with the Company, namely <ol style="list-style-type: none"> Mr. Prasert Siriviriyakul. The Company's shareholders and related companies hold shares in Nakornsawan Ruamtoonpattana is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Sugar Transportation Cost</u></p> <p>TIS engaged Nakornsawan Ruamtoonpattana in the transportation of sugar to the warehouses.</p> <p><u>Accrued Transportation Expenses</u></p> <p>Sugar transportation expenses</p> <p><u>Other Revenue</u></p> <p>Compensation for damage of goods (sugar)</p> <p><u>Deposit – Transportation Cost</u></p> <p>Cost to guarantee the payment of compensation for damage during the transportation.</p>

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
5,300,000.00	3,974,999.99	6,134,385.44	<ul style="list-style-type: none"> The Company leased land from RPE, with total area of 173 rai, 95.9 sq.wah., located at Ban Ma Glua, Muang, Nakornsawan, which was part of the lease of sugar factories from RPE. The land lease agreement was made on 16 July 2012 at the lease fee of THB 5,300,000 per year, increasing every 5 years based on the 5-year average CPI, but not exceeding 20% of the prior year's lease fee rate. The land lease agreement has the term of 30 years and can be renewed to extend the term for another 30 years. The rate of lease fee was in line with the appraisals conducted by Knight Frank Charter (Thailand) Co., Ltd. on 8 May 2012 and Sallmanns (FarEast) Limited on 21 May 2012. The company leased the land from RPE. The price, terms and conditions are more favorable for the company than the market rates and conditions.
101,000,000.00	101,000,000.00	101,000,000.00	
3,312,499.99	4,637,500.00	4,637,500.00	
798,916,670.50	791,097,504.26	782,418,229.73	
32,955,312.65	10,877,590.59	10,758,250.66	
88,365,128.98	65,803,111.80	86,901,385.44	
824,800.00	622,199.44	6,167,734.60	
178,811.52	128,779.00	206,212.24	
12,411.41	13,118.26	17,599.45	
-	213,186.86	516,288.60	
127,054.79	-	38,271.03	
1,241,766.36	12,249.99	-	<ul style="list-style-type: none"> KTIS group has used hotel accommodation for seminars and services from SSPW which owns a resort located at 1/79, Moo 2, Kaengsopha, Wangthong, Phitsanulok. The price, terms and conditions are more favorable for the company than the market rates and conditions.
367,630.00	-	-	
6,875,055.69	8,966,330.86	6,448,045.75	<ul style="list-style-type: none"> TIS engaged Nakornsawan Ruamtoonpattana in the transportation of sugar to the warehouses. Prices, terms and conditions are in line with the market rates and practices.
-	1,052,576.14	447,131.31	
15,429.91	13,345.79	13,009.35	
90,237.63	-	-	

Related Person/ Companies	Nature of Relationship	Nature of Transaction
16. PoomPattana Business Co.,Ltd ("PP") Property Business	<ul style="list-style-type: none"> Related parties hold shares in PP is Related parties hold shares in PP is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Land Lease Expenses</u></p> <p>KTIS ,TIS, KTBE,EPPCO and KTBF leased land</p> <p><u>Accrued expenses</u></p> <p>Costs payable from KTBF leased land.</p> <p><u>PrepaidExpenses</u></p> <p>Prepayment of the land lease fees</p>
17. Agro Ethanol Co.,Ltd ("Agro Ethanol ") Property Business	<ul style="list-style-type: none"> Agro Ethanol has 1 common director with theCompany,namely (1) Mr.Sirapak Siriviriyakul Related company shareholders in Agro Ethanol is Aekphol Sugar Co., Ltd. 	<p><u>Land Lease Expenses</u></p> <p>KTIS and EPPCO leased land</p> <p><u>PrepaidExpenses</u></p> <p>Prepayment of the land lease fees</p>
18. EPC Power Co.,Ltd ("EPC Power") Property Business	<ul style="list-style-type: none"> EPC Power has 1 common director with the Company, namely (1) Mr.Sirapak Siriviriyakul Related company shareholders in EPC Power is Aekphol Sugar Co., Ltd. 	<p><u>Land Lease Expenses</u></p> <p>KTIS and KTBE leased land</p> <p><u>PrepaidExpenses</u></p> <p>Prepayment of the land lease fees</p>
19. Kaset Thai Sugar Co.,Ltd ("KT") (Formerly operated sugar production and trading business but currently is not in business operation.)	<ul style="list-style-type: none"> KT has 1 common director with theCompany,namely (1) Mr.Sirapak Siriviriyakul Related company shareholders in KT is Aekphol Sugar Co., Ltd. 	<p><u>Land Lease Expenses</u></p> <p>Land Lease Expenses</p> <p><u>Prepaid land Lease</u></p> <p>Prepaid land Lease</p>
20. Siriviriyakul Co.,Ltd ("Siriviriyakul") Property Business	<ul style="list-style-type: none"> Siriviriyakul has 1 common director with theCompany,namely (1) Mrs. Darat Vibhatakalasa The Company's shareholders and related companies hold shares in Siriviriyakul is Jaroon Hatai Ake Holding Co.,Ltd 	<p><u>Land Lease Expenses</u></p> <p>Land Lease Expenses</p> <p><u>Prepaid land Lease</u></p> <p>Prepaid land Lease</p>

Transaction Value (THB)			Rationale of the transaction
31 December 2017	30 September 2018	30 September 2019	
6,055,873.19	4,546,870.91	7,936,618.44	<ul style="list-style-type: none"> KTBF has leased the land from PP for use as fertilizer plant and operate area. KTIS and TIS have leased the land from PP for use as fertilizer plant and operate area EPPCO has leased the land from PP 35 area, approximately 459-0-87.3 rai to manage waste management and salads. KTBE has leased the land from PP 35 area, approximately 965 rai to manage waste management and salads. Prices, terms and conditions are in line with the market rates and practices.
-	2,264.95	2,514.22	
27,216.18	1,512,748.84	4,759,104.15	
293,760.00	220,173.99	207,459.72	<ul style="list-style-type: none"> KTIS has leased the land from Agro Ethanol for use as fertilizer plant and operate area. EPPCO has leased the land from Agro Ethanol for use as operate area. Prices, terms and conditions are in line with the market rates and practices.
-	73,586.01	45,092.29	
182,400.00	136,703.35	280,216.38	<ul style="list-style-type: none"> KTIS has leased the land from EPC Power for use as fertilizer plant. KTBE has leased the land from EPC Power for use as fertilizer plant. Prices, terms and conditions are in line with the market rates and practices.
-	45,696.65	107,353.61	
1,920.00	1,920.00	33,828.03	<ul style="list-style-type: none"> The Company has leased the land from KT for use in sugarcane planting. Prices, terms and conditions are in line with the market rates and practices.
-	-	26,310.63	
-	-	117,920.61	<ul style="list-style-type: none"> The Company has leased the land from KT for use in sugarcane planting. Prices, terms and conditions are in line with the market rates and practices.
-	-	58,959.80	

Conclusions relating to the related party transactions

After having thoroughly considered all the connected transactions for the financial year ended September 30, 2019, as well as having obtained information from the management and verified the information specified in the notes to the financial statements, the audit committee, at Audit Committee Meeting, no. 1/2020 held on November 25, 2019, concluded that the connected transactions for the financial year ended September 30, 2019 were conducted in the ordinary course of business. The transactions were also deemed to be conducted on an arm's length basis. There was also no transfer or diversion of interests between our Company and persons who may have conflicts of interests.

The approval procedure for related party transactions

Our policy and procedures for related party transactions with persons who may have conflicts of interests are summarized as follows.

We shall abide with all principles and procedures as provided in the Securities Act, the Notification of Capital Market Supervisory Board, ref. Tor.Jor. 21/2551 (A.D. 2008) on related party transaction principle, the Notification of the Board of Governors of the Stock Exchange of Thailand on the disclosure of information and other acts of listed companies concerning related party transactions, relevant rules of the Securities and Exchange Commission and the Stock Exchange of Thailand and the provisions on disclosure of related party transactions in notes to audited financial statements and annual registration statements (56-1).

The audit committee shall evaluate any transaction for which prior approval from the board of directors or shareholders is required by law. The audit committee's opinions will be presented at the board and shareholder meetings. This ensures that we will only enter into transactions which are in our best interests.

In the event that other parties in proposed related transactions may face conflicts of interests, the audit committee will provide an opinion on the necessity of entering into the transaction, on whether the terms and the prices have been offered according to industry practice and how they compare to terms offered by other vendors. In addition, where required, we may appoint an independent specialist to provide an opinion on the transaction. Directors with vested interests in the transactions will be precluded from voting and such transactions must be disclosed in the notes to the audited financial statements.

As a rule, the management is authorized to approve transactions if their trading terms and conditions were determined on an arm's length basis. We will be issuing a summary report on transactions with total values in excess of Baht 5,000,000, at our next board meeting.

Our policy towards future related party transactions

All related party transactions shall only be carried out in adherence with all applicable rules and principles of the Stock Exchange of Thailand and the Securities and Exchange Commission.

We will continue to strictly observe and abide by the aforementioned policy and procedures for related party transactions. The audit committee provides guidance on the approval of related party transactions. It will consider the necessity of a transaction for our business operations and compare it against prices and terms offered by other vendors, if any. The audit committee will also take into account size of the transaction.

If the audit committee does not specialize in a particular kind of transaction, we will appoint persons with the requisite skills and knowledge to provide their opinions on the transaction. Such persons may be independent auditors or real estate appraisers whose opinions will facilitate the decision making processes of our board of directors or shareholders, ensure that the transaction does not involve a transfer or diversion of interests between companies within KTIS group or among our shareholders and that shareholders' interests are protected.

Management Discussion & Analysis

Overall operation of 2019

The total income composes of income from sale and service, income from the return of sugar production and sale, income from sugar cane farmers and sugar mill supporting project and other income. For 2019 financial year ended on 30th September 2019 (12 months), the company has the total income of 16,886.0 million Baht, while in 2018 financial year ended on 30th September 2018 (9 months) the company has the total income of 18,067.1 million Baht.

An income from sale and services in 2019 is 16,130.0 million Baht, decreased for 1,181.2 million Baht or 6.5% from 2018 which is 17,305.7 million Baht. The cause of a decrease of income in sugar business is explained as follows:

Production year		2017/2018	2018/2019	
Thailand	Sugar cane	134.9	131.0	Million tons
	Sugar	147.1	145.8	Million sacks (100 kilograms per sack)
	Molasses	5.5	5.9	Million tons
Company	Sugar cane	11.6	9.9	Million tons
	Sugar	11.9	10.3	Million sacks (100 kilograms per sack)
	Molasses	0.5	0.5	Million tons

Source : Office of Sugar and Cane Committee date 31st May 2019

- An income in sugar business decreased for 14.9% since the amount of sugar sale decreased for 9.8% and the amount of molasses sale decreased for 17.7% in average, and the selling price of sugar decreased for 4.9%, and the selling price of molasses decreased for 9.6% in average.
- An income from bagasse pulp business increased for 7.6% since the amount of bagasse pulp selling increased for 8.2% and the domestic bagasse pulp price increased for 4.4% in average.
- An income from ethanol business increased for 23.3% since the amount of ethanol sale increased for 30.9%, although the ethanol price decreased for 5.8% in average.
- An income from electricity increased for 28.8% since the amount of electricity sold by the company's 3 powerplants increased for 26%, and the electricity price per unit increased for 2.2% in average.
- An income from other sale and service increased for 8.4% since the increase of the variety of agricultural machine services, sale of fertilizer, pesticide and others

An income from the compensation of sugar production and distribution in 2018 is 472.2 million Baht and 101.9 in 2019 is million Baht. This compensation is expected to be paid to the company by the Cane and Sugar Fund since the production year 2017/2018 and 2018/2019 the final cane price and return from sugar production and distribution is expected to be lower than the preliminary price. The cane and sugar act designated the fund to compensate such difference to the Company and sugarcane farmers do not have to return the surplus of their sugarcane price.

An income from sugar cane farmers and sugar mill supporting program in 2019 is 162.1 million Baht, this income is paid from the Cane and Sugar Fund according to sugar cane farmers and sugar mill supporting program of the production year 2018/2019.

Other income composes of interest received, gain from exchange and profit for future contract of sugar sale.

- Interest received in 2019 is 61 million Baht increased 30.3 million Baht which increased for 98.7% from 2018
- Gain from exchange in 2019 is 85.2 million Baht, while in 2018 gain from exchange is 50.3 million Baht due to Thai Baht appreciation.
- Profit for future contract of sugar sale in 2019 decreased 33.2 million Baht or decreased for 35.9% from 2018

Cost of sale and services in 2019 decreased 1,638.5 million Baht or decreased for 11.4% from 2018 due to the decrease of sale amount.

Expense for sale and services in 2019 increased 394.9 million Baht or decreased for 15.6% from 2018 due to the money delivered to the office of the office of Cane and Sugar Fund, logistic expense, storage expense for sugar and molasses, human resources expenses and others

Financial expense in 2019 increased 40.7 million Baht or increased for 15.5% due to the increase of loan for investment in projects

Tax expense in 2019 decreased 94.8 million Baht or decreased for 44.3% due to the increase of deferred tax for 110%

According to the aforementioned factors, in 2019 the company gained the net profit of 740.1 million Baht increased for 17.6% compared with the net profit in 2018 which is 629.3 million Baht.

The analysis of the operation

Income	2018 (9 months) (million)	2019 (12 months) (million)	chang (million)	chang (percentage)
Income from sale and services	17,305.7	16,130.0	(1,175.7)	(6.8%)
Sugar production and distribution business	13,056.9	11,107.5	(1,949.4)	(14.9%)
Income from sugar distribution	12,219.0	10,484.4	(1,734.6)	(14.2%)
Income from molasses	837.9	623.1	(214.8)	(25.6%)
Downstream business	4,248.8	5,022.5	773.7	18.2%
Income from bagasse pulp	1,216.6	1,309.5	92.9	7.6%
Income from ethanol	1,313.4	1,619.4	306.0	23.3%
Income from electricity	1,131.2	1,456.8	325.5	28.8%
others	587.5	636.9	49.3	8.4%
Income from the return of sugar production and	472.2	101.9	370.3	(78.4%)
Income from sugar cane farmers and sugar mill supporting program	-	162.1	-	-
Other	289.3	492.0	202.6	70.0%
Total	18,067.1	16,886.0	(1,181.2)	(6.5%)

Source : the company

Total income

The company's total income in 2019 (12 months) is 16,886 million Baht decreased for 6.5% from total income in 2018 (9 months) which is 18,067.1 million Baht with following detail

Sugar production and distribution business

Income of sugar production and distribution business in 2019 and 2018 is 11,107.5 million Baht and 13,056.9 million Baht accordingly and decreased for 14.9% due to these following factors:

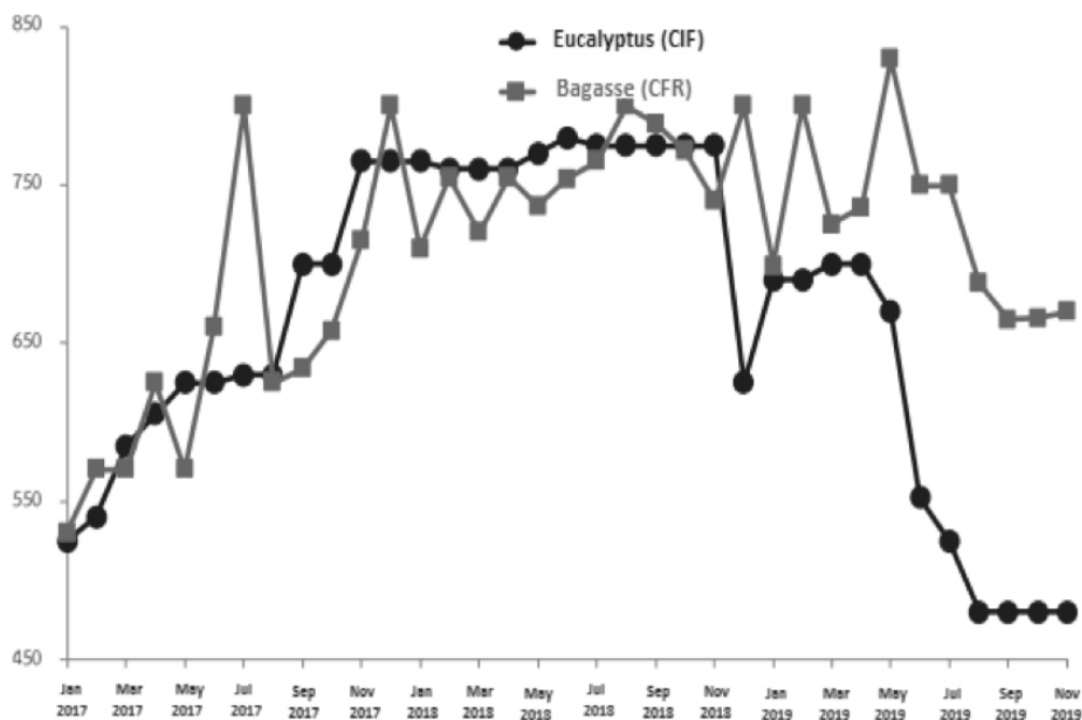
- The domestic sale amount of sugar in 2019 is 167,816.7 tons decreased 13.5% from 2018. And the international sale amount of sugar in 2019 is 787,804.8 tons decreased 9% from 2018.
- The domestic average sale price of sugar in 2019 is 16,904.2 Baht per ton decreased 4.1% from 2018 due to the sugar price floating policy since the beginning of 2018. And, the international average sale price of sugar in 2019 is 9,785.3 Baht per ton decreased 7.7% from 2018 due the serious decline of international sugar price.
- The molasses sale amount in 2019 is 197,661.7 tons decreased 17.7% from 2018
- The average sale price of molasses in 2019 is 3,152.3 Baht per ton decreased 9.16% from 2018 due to the competitive market caused by the surplus of molasses.

Downstream business

The company's income of downstream business in 2019 is 5,022.5 million Baht increased 18.2% from 2019 which is 4,248.8 million Baht with is the consequence of

- (1) Income from electricity sale in 2019 and 2018 is 1,456.8 million Baht and 1,131.2 million Baht accordingly, increased 28.8% due to the amount of electricity sold by the company's 3 powerplants increased, meanwhile the average electricity price per unit in 2019 is 3.12 Baht increased 2.2% compared to the average electricity price per unit in 2018 is 3.05 Baht
- (2) Income from bagasse pulp in 2019 and 2018 is 1,309.5 million Baht increased 7.6% from 2018 which is 1,216.6 million Baht due to these following factors,
 - The sale amount of bagasse pulp in 2019 and 2018 is 57,342.5 tons and 53,006.6 tons accordingly or increased 8.2% from the increase of domestic and international sale amount.
 - The domestic average sale price of bagasse pulp in 2019 reached 23,608.5 Baht per ton from the price 22,623.2 Baht per ton in 2018, the international average sale price of bagasse pulp in 2019 dropped to 22,613.3 Baht per ton from the price 23,023.7 Baht per ton in 2018.

The graph exhibiting the previous change of bagasse pulp price



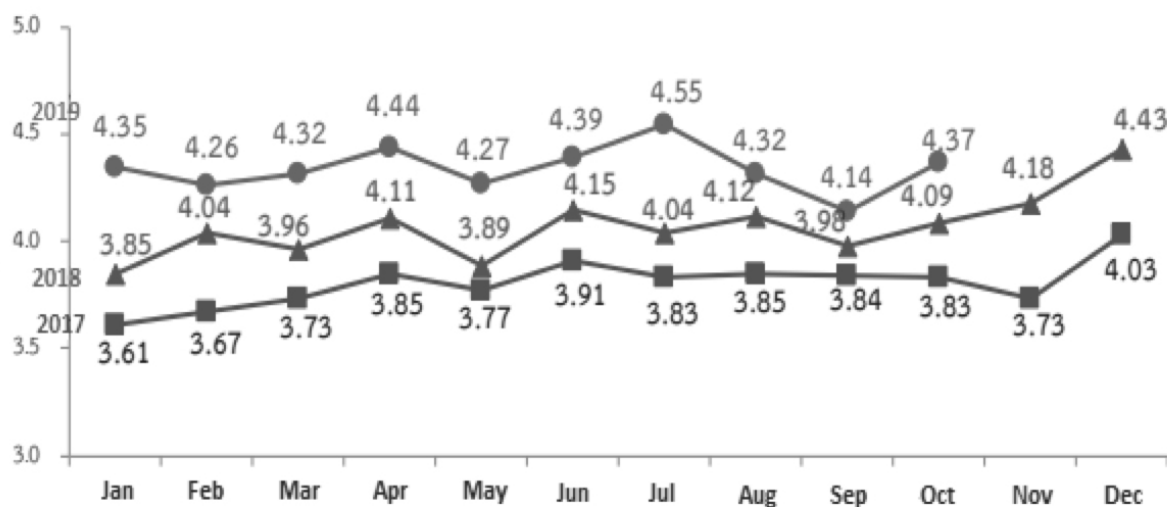
Source : RISI and the Company

(3) Income from ethanol in 2019 and 2018 is 1,619.4 million Baht and 1,313.4 million Baht accordingly, increased 23.3% due to these following factors

- The sale amount of ethanol in 2019 and 2018 is 73.6 million liters and 56.3 million liters accordingly or increased 30.9%
- The domestic average sale price bagasse pulp in 2019 is 21.99 Baht per liter decreased 5.8% from 2018 which is 23.24 Baht per liter due to the serious price competitiveness for domestic fuel sale and the decline of international oil price.

The graph exhibiting the previous change of ethanol

Million liters per day



Source : Ministry of energy

- (4) Income from other services and others in 2018 and 2019 is 636.9 million Baht and 587.5 million Baht accordingly increased 8.4% due to the increase of the variety of agricultural machine services, sale of fertilizer, pesticide and others

Income from the compensation of sugar production and distribution

An income from the compensation of sugar production and distribution in 2018 is 472.2 million Baht and in 2019 is 101.9 million Baht. This compensation is expected to be paid to the company by the Cane and Sugar Fund since the production year 2017/2018 and 2018/2019 the final cane price and return from sugar production and distribution is expected to be lower than the preliminary price. The cane and sugar act designated the fund to compensate such difference to the Company and sugarcane farmers do not have to return the surplus of their sugarcane price.

Income from sugar cane farmers and sugar mill supporting program

An income from sugar cane farmers and sugar mill supporting program in 2019 is 162.1 million Baht, this income is paid from the Cane and Sugar Fund according to sugar cane farmers and sugar mill supporting program of the production year 2018/2019.

Other income

The company has interest received in 2019 (12 months) and 2018 (9 months) which is 61 million Baht and 30.7 million Baht accordingly

Gain from exchange in 2019 is 85.2 million Baht, while in 2018 gain from exchange is 50.3 million Baht due to Thai Baht appreciation.

- Profit for future contract of sugar sale in 2019 is 59.3 million Baht or decreased for 35.9% from 2018 (9 months) which is 92.5 million Baht

Other income in 2019 (12 months) is 286.4 million Baht increased for 147.3% from 2018 (9 months) which is 115.8 million Baht due to insurance claim, damages compensation, quota B fee and the sale of scrap

Cost of sale and services and gross profit margin

Cost of sale and services in 2019 (12 months) 12,784.6 million Baht decreased for 11.4% from 2018 (9 months) which 14,423.1 million Baht

Cost of sale and services and gross profit margin of 2019 and 2018 comparison is exhibited in below table

Income	2018 (9 months) (million Baht)	2019 (12 months) (million Baht)	Change (million Baht)	Change (million Baht)
Income from sale and services	17,305.7	16,130.0	(1,175.7)	(6.8%)
Sugar production and distribution business	13,056.9	11,107.5	(1,949.4)	(14.9%)
Downstream business	4,248.8	5,022.5	773.7	18.2%
Cost of sale and services	14,423.1	12,784.6	(1,638.5)	(11.4%)
Sugar production and distribution business	11,857.2	9,506.9	(2,350.3)	(19.8%)
Downstream business	2,565.9	3,277.8	711.9	27.7%
Gross profit	3,354.8	3,447.3	92.5	2.8%
Sugar production and distribution business	1,671.8	1,702.5	30.7	1.8%
Downstream business	1,682.9	1,744.8	61.9	3.7%
Gross profit margin	18.9%	21.2%		2.3%
Sugar production and distribution	12.4%	15.2%		2.8%
Downstream business	39.6%	34.7%		(4.9%)

Source : the Company

The gross profit in 2019 (12 months) is 3,447.3 million Baht increased from the gross profit of 2018 which is 3,354.8 million Baht or increased 2.8% due to the increase of gross profit of sugar production and distribution business and downstream business

The increase of gross profit of downstream business caused by these following reason

- The amount of electricity sale in 2019 is 466,688,087 units increased for 26% from 2018 which is 370,290,600 units. the average electricity price per unit in 2018 is 3.05 Baht increased to 3.12 Baht in 2019.
- The sale amount of bagasse pulp in 2019 and 2018 is 57,342.5 tons increased 8.2% from 2018 which is 53,006.6 tons, although the average sale price bagasse pulp in 2019 decreased for 0.5% from 2018 which is 22,952.4 Baht per ton to 22,836.9 Baht per ton in 2019.
- The sale amount of ethanol in 2019 is 73.6 million liters increased 30.9% from 2018 which is 56.3 million liters accordingly. Although the domestic average sale price of ethanol in 2019 decreased 5.8% from 2018 which is 23.44 Baht per liter to 21.99 Baht per liter in 2019.

The gross profit of sugar production and distribution business increased due to the cost of sale and services of sugar production and distribution decreased from 11,857.2 million Baht in 2018 to 9,506.9 million Baht in 2019.

The expense of sale and management

The expense of sale and management in 2019 (12 months) is 2,933.5 million Baht increased 15.6% from 2018 (9 months) which is 2,538.7 million Baht due to the money delivered to the office of the Cane and Sugar Fund, logistic expense, storage expense for sugar and molasses, human resources expenses and others.

The financial expense

The financial expense in 2019 (12 months) is 303.2 million Baht increased 15.5% from 2018 (9 months) which is 262.4 million Baht due to additional investment,

Tax Income

Tax expense in 2019 decreased 119.0 million Baht , while Tax expense in 2018 is 213.7 million Baht or decreased for 44.3% due to the increase of deferred tax for 110%.

Net profit and net profit margin

In 2019 (12 months) the Company has the net profit of 740.1 million Baht compared with 2018 (9 months) which is 629.3 million Baht. The net profit margin in 2019 (12 months) and 2018 (9 months) is 4.56% and 3.54% accordingly.

Financial Analysis

Asset

On 30th September 2019 the non-current asset of company is 19,119.7 million Baht increased 4.1% from 2018 which is 18,358.4 million Baht

- The current asset of 30th September 2019 is 19,119.7 million Baht increased 740.4 million Baht or 10.6% from 2018 which is 6,968.4 million Baht with following factors
 - Account receivable and other receivable increased 318.7 million Baht
 - Receivable of Cane and Sugar Fund which shall due within a year is 250.7 million Baht

- Inventory in stock increased for 226.2 million Baht
- Deferred repair expenses increased for 183.5 million Baht
- the non-current asset of company at 30th September 2019 is 11,410.9 million Baht increased for 20.9 million Baht or increased for 2% from 2018 which is 11,390.0 million Baht with following factors
 - Investment in joint venture increased for 280.6 million Baht
 - Receivable of Cane and Sugar Fund which shall due after a year increased 104.6 million Baht
 - Deferred tax increased for 10.3 million Baht

Debt

On 30th September 2019 debt of the company is 10,777.5 million Baht increased 6 % from 2018 which is 10,164.4 million Baht.

- The current liability at 30th September 2019 is 7,592.4 million Baht increased for 1,278.6 million Baht or increased 20.3% from 2018 which is 6,313.8 million Baht with following factors
 - The current liability from the Cane and Sugar Fund increased for 902.4 million Baht
 - The overdraft and the short-term loan from banks increase for 288.0 million Baht with following factors
 - Account payable and other payable increases for 294.6 million Baht
- The non-current liability at 30th September 2019 is 3,185.1 million Baht decreased for 665.5 million Baht or decreased from 2018 which is 3,850.6 million Baht from the repayment of long-term loan with banks and long-term loan with the Cane and Sugar Fund include the decrease of other non-current liability.

Equity

On 30th September 2019 equity of the company is 8,342.1 million Baht increased 1.8 % from 2018 which is 8,194.0 million Baht from the profit return in 2019

Liquidity and sufficiency of capital

The company has elevated the relationship and cooperation with financial institutions by focusing on strategic partner as the growing partners. The company has been partnering to develop financial products and services such as comprehensive cash management, online sale cheque. Therefore, the company gained trust from financial institutions and gain the support of sufficient capital and the cooperation to support the company's investment in future.

Cash flow

In 2019, the company has the net profit of 740.1 million Baht. The depreciation and amortization are 1,270.4 million Baht. After the adjustment of non-cash items, the company has the profit from operation before changes in asset and debt at 2,613.9 million Baht, and has the net cash used in financial activities at 436.1 million Baht which causes the cash and cash equivalent items is 5.9 million Baht. The cash and cash equivalent at the beginning period is 300.9 million Baht and the cash and cash equivalent at the end period is 295.0 million Baht.

Financial liquidity

The liquidity ratio under consolidated financial report at 30th September 2019 is 1.02 which decreased from the last year which is 1.10, and the quick ratio is at the same level with the last year which is 0.21.

The company has developed the cash management system with financial institutions in the whole group basis, which helps the company to use the surplus cash of each day to repay working capital. In the case that the company needs to use cash, it could also withdraw from daily working capital as well. Such management helps the company to save the financial cost which includes the option of capital market of working capital financing through short term bills of exchange that result in good liquidity and proper financial cost with the short term and long-term competitiveness.

Source of and uses of capital and the appropriateness of capital structure

The company has implemented the appropriate financial structure to support business operation and to create the value to the shareholders by taking a concern of financial risk prevention

After the company began to restructure its and its subsidiaries' financial structure since 2015 by long term loan from financial institutions. Currently the company has the remaining long-term loan with financial institutions after the loan due within 1 year for 1,349.0 million Baht.

The debt to equity ratio at 30th September 2019 is 1.29 increased from 2018 which is 1.24. Such ration shall not cause any significant financial risk. Further, the company still have the capability to leverage for the operation of the company and its subsidiaries which includes the opportunity for future project,

Investment expense and source of fund

In 2019 the company has the net cashflow spent for investment at 1,118.6 million Baht. The majority of the investment is the investment in joint venture includes the investment in machinery renovation for better efficiency which used the company's working capital.

The situations that shall affect the company's future financial status or operation

The factor of uncertainty in world economic is still in unstable stage, especially the situation of politic in U.S.A, trade war between U.S.A., and China which still does not reach the settlement. Meanwhile the Brexit situation, the interest rate decrease of FOMC shall also affect Thailand's interest rate and currency exchange of Baht appreciation compared with US dollars. The fluctuation of oil price in world market shall also affect the cost of production and price of fuel in Thailand.

Meanwhile, Thailand still has a strong international reserve and has a good balance of trade and balance of current account with the policy of government's big investment. It shall result in the good economic policy drive and the year 2019/2020 should be a good year for Thailand but the aforementioned external factors should be reminded.

After the government cancel the policy of sugar distribution quota system and the controlled domestic sugar price and the domestic sugar demand of industrial needs and direct consumption, the domestic sale of sugar has a risk of intensive competition since all sugar producers could freely made domestic sale. The company realized such risk and has prepared the marketing plan to handle the occurring opportunity, Further the company has renovated the efficiency of machinery and equipment includes human resources, by the implementation of the modern technology into the production to serve the expectation and demand of customers.

The risk management committee has reviewed the policy and monitored the risks frequently, to ensure that the standard operation and the risk management plan in every aspect shall control the specified risk to be in the acceptable level.

Declaration of the Directors' Responsibility for the Financial Statements

The Board of Directors of the Kaset Thai International Sugar Corporation Plc. has prepared the Company's financial statements to show its financial status and performance for 2019 under the Public Company Limited Act of 1992, the Accounting Act of 2000, the Securities and Exchange Act 1992, and the announcement of the Capital Market Supervisory Board concerning the criteria, conditions and reporting method for the disclosure of information on financial status and performances of companies the issue securities.

The Board recognizes its duties and responsibility for directing a listed company, particularly the responsibility for financial statements of the Company and its subsidiaries – including financial information that appears in the annual report of 2019. Such statements have been prepared under generally accepted accounting standards, which regularly complies with a suitable accounting policies and due and reasonable discretion exercised in the preparation of financial statements. Adequate significant information has been disclosed in the notes to these financial statements for transparent use by shareholders and investors at large.

The Board has instituted and maintained effective risk management and internal control systems to become reasonably confident of accurate, complete, and adequate accounting information to retain Company assets and prevent fraud or significant anomalies in operation.

The Audit Committee, acting on behalf of the Board, has been assigned responsibility for the quality of financial reports and internal control system, and its opinions duly appear in its own report found in this publication.

It is our view that the Company's internal control system is, on the whole, satisfactory and can reasonably assure us that the financial statements of the Company and its subsidiaries ended September 30, 2019 are reliable under generally accepted accounting standard, legally sound, and acceptable to relevant regulations.



Mr. Pricha Attavipach
Chairman



Mr. Parphan Siriviriyakul
Chief Executive Officer-KTIS Group

Independent Auditor's Report

Independent Auditor's Report

To the Shareholders of Kaset Thai International Sugar Corporation Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 30 September 2019, and the related consolidated statements of comprehensive income, changes in shareholders' equity and cash flows for the year ended 30 September 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of Kaset Thai International Sugar Corporation 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 Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries and of Kaset Thai International Sugar Corporation Public Company Limited as at 30 September 2019, their financial performance and cash flows for the year ended 30 September 2019 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 Matter

I draw attention to Note 1.2 of the financial statements, which describes the changed its financial year end from 31 December to 30 September in 2018. Consequently, the consolidated and separate statement of comprehensive income, changes in shareholders' equity, and cash flows for the period from 1 January 2018 to 30 September 2018 of which the comparative information covered only the nine month period whereas the financial statements for the year ended 30 September 2019 presented the information for the twelve month period, As a result, the operating results of these periods were not comparable. My opinion is not modified in respect of this matter.

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.

Net realisable value of inventory in manufacture and distribution of sugar

The Group had significant outstanding balance of inventory in manufacture and distribution of sugar as at 30 September 2019 amounting to Baht 3,109 million since sugar is commodity and the prices was set by global demand and supply causing sugar price for export sales fluctuated as market price. As a result, estimating the net realisable value of inventory is an area of significant management judgement. This requires detailed analysis of the competitive environment, economic circumstances, the situation within the industry and basis applied in the estimating price of sugar exports. There is thus a risk with respect to the amount of provision set aside for diminution in the value of inventory.

I assessed and tested the internal controls of the Group relevant to the determination of provision for diminution in the value of inventory in manufacture and distribution of sugar. I also evaluated the method and the assumptions applied by management in determining such provision. The procedures that I performed included:

- Gaining an understanding of the basis applied in determining the provision for diminution in value of inventory and reviewing the consistency of the application of that basis.
- Comparing details of sales contract occurring after the date of the financial statements with the cost of inventory for each product line.
- Reviewing the appropriateness of the sales forecasts by product line that were prepared by the Group's management, in comparison with global sugar prices.

Revenue recognition from export sales of sugar

Revenue from export sales of sugar is the most significant amount in the statements of comprehensive income and it is a key performance indication which the financial statements' users focus. For the year ended 30 September 2019, the export sugar sales of the Group is Baht 7,708 million (represented 46% of total revenues). In addition, the Group has significant numbers of sugar futures contracts. Therefore, there is a risk with respect to the amount and timing of revenue recognition. For this reason, I have paid particular attention to the Group's recognition of revenue from export sales of sugar in order to ensure that the revenue is recorded correctly and in accordance with the relevant accounting standards.

I have examined to ensure that the revenue from export sales of sugar is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer. The procedures that I performed included:

- Assessing the appropriateness and testing the effectiveness of the Group's internal controls with respect to the revenue from export sales of sugar cycle.
- Applying a sampling method to select sales agreements to verify the accuracy and appropriateness of revenue recognition, whether the recognition was consistent with the conditions of the relevant agreement, and whether it was in compliance with the Group's policy.
- On a sampling basis, examining supporting documents for actual sale transactions occurring during the year and near the end of the accounting period.
- Reviewing credit notes that the Group issued after the period-end.
- Performing analytical procedures on disaggregated data to detect possible irregularities in sale transactions.

Other Information

Management is responsible for the other information. The other information comprises 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.



Vilailak Laohasrisakul

Certified Public Accountant (Thailand) No. 6140

EY Office Limited

Bangkok: 25 November 2019

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of financial position

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
		As at	As at	As at	As at
	Note	30 September 2019	30 September 2018	30 September 2019	30 September 2018
Assets					
Current assets					
Cash and cash equivalents	8	294,964,989	300,866,711	175,050,164	138,400,647
Trade and other receivables	7, 9	1,309,671,083	991,003,165	804,144,552	479,984,631
Planters receivables	10	391,461,640	574,820,911	259,371,284	403,646,395
Short-term loans to related parties	7	-	-	3,044,326,756	2,517,519,609
Inventories	11	3,417,237,620	3,191,031,522	1,782,608,599	2,100,698,397
Biological assets	12	47,479,481	57,854,508	36,982,362	41,434,483
Factory overhaul costs		742,011,325	558,529,297	558,022,151	393,071,404
Current portion of amounts due from the Office of the Cane and Sugar Fund	13	1,419,853,658	1,169,109,721	1,118,021,200	922,084,190
Other current assets	7	86,087,574	125,171,660	32,291,321	59,796,616
Total current assets		7,708,767,370	6,968,387,495	7,810,818,389	7,056,636,372
Non-current assets					
Investments in subsidiaries	14	-	-	9,442,687,369	9,428,539,547
Investment in joint venture	15	280,615,992	-	-	-
Other long-term investments		262,450	262,450	50,975	50,975
Amounts due from the Office of the Cane and Sugar Fund - net of current portion	13	576,797,547	472,147,801	454,181,921	372,385,940
Investment properties	16	323,740,616	322,319,260	12,378,480	12,378,479
Property, plant and equipment	17	9,526,808,725	9,941,639,898	3,423,157,928	3,642,812,972
Intangible assets	18	257,808,984	271,746,352	2,637,973	400,314
Deferred tax assets	30	217,228,577	206,912,827	201,748,487	181,995,405
Other non-current assets	7	227,645,828	175,000,431	172,024,816	158,147,606
Total non-current assets		11,410,908,719	11,390,029,019	13,708,867,949	13,796,711,238
Total assets		19,119,676,089	18,358,416,514	21,519,686,338	20,853,347,610

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of financial position (continued)

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		As at	As at	As at	As at
		30 September 2019	30 September 2018	30 September 2019	30 September 2018
Liabilities and shareholders' equity					
Current liabilities					
Bank overdrafts and short-term loans from financial institutions	19	3,848,498,765	3,560,510,624	3,844,755,564	3,560,397,804
Trade and other payables	7, 20	1,672,444,638	1,377,884,767	1,096,550,898	868,107,304
Short-term loans from related parties	7	-	-	1,729,106,530	1,546,162,831
Short-term loans from the Office of the Cane and Sugar Fund	21	1,170,920,794	268,487,242	923,501,258	208,408,311
Current portion of liabilities under finance lease agreements	22	9,633,995	8,679,274	9,633,995	8,679,274
Current portion of long-term loans from financial institutions	23	748,446,701	848,573,224	598,925,349	548,573,224
Current portion of long-term loans from related party	7	4,850,000	4,850,000	-	-
Current portion of long-term loans from the Office of the Cane and Sugar Fund	24	12,540,503	94,940,113	-	61,233,650
Income tax payable		59,316,326	63,947,313	-	-
Other current liabilities	7	65,752,264	85,918,749	21,231,648	37,108,622
Total current liabilities		7,592,403,986	6,313,791,306	8,223,705,242	6,838,671,020
Non-current liabilities					
Liabilities under finance lease agreements					
- net of current portion	22	772,784,235	782,418,230	772,784,235	782,418,230
Long-term loans from financial institutions					
- net of current portion	23	1,349,021,716	2,097,468,418	1,349,021,716	1,947,947,065
Long-term loans from related party					
- net of current portion	7	63,050,000	67,900,000	-	-
Long-term loans from the Office of the Cane and Sugar Fund					
- net of current portion	24	8,411,144	20,951,648	-	-
Provision for long-term employee benefits	25	481,441,492	342,862,298	288,608,902	209,727,291
Provision for decommissioning costs		31,280,295	30,163,838	-	-
Other non-current liabilities	7	479,154,203	508,867,345	-	-
Total non-current liabilities		3,185,143,085	3,850,631,777	2,410,414,853	2,940,092,586
Total liabilities		10,777,547,071	10,164,423,083	10,634,120,095	9,778,763,606

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of financial position (continued)

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
		As at	As at	As at	As at
	Note	30 September 2019	30 September 2018	30 September 2019	30 September 2018
Shareholders' equity					
Share capital					
Registered					
3,888,000,010 ordinary shares of Baht 1 each		<u>3,888,000,010</u>	<u>3,888,000,010</u>	<u>3,888,000,010</u>	<u>3,888,000,010</u>
Issued and fully paid up					
3,860,000,010 ordinary shares of Baht 1 each		3,860,000,010	3,860,000,010	3,860,000,010	3,860,000,010
Share premium		5,202,881,296	5,202,881,296	5,202,881,296	5,202,881,296
Capital deficit from business combination under common control		(3,577,165,024)	(3,577,165,024)	(573,217,706)	(573,217,706)
Capital surplus on share-based payment	27	200,200,000	170,540,741	200,200,000	170,540,741
Retained earnings					
Appropriated - statutory reserve		324,484,433	305,526,427	324,484,433	305,526,427
Unappropriated		<u>2,331,728,303</u>	<u>2,232,209,981</u>	<u>1,871,218,210</u>	<u>2,108,853,236</u>
Total shareholders' equity		<u>8,342,129,018</u>	<u>8,193,993,431</u>	<u>10,885,566,243</u>	<u>11,074,584,004</u>
Total liabilities and shareholders' equity		<u>19,119,676,089</u>	<u>18,358,416,514</u>	<u>21,519,686,338</u>	<u>20,853,347,610</u>
		-	-	-	-

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of comprehensive income)

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
			For the period from		For the period from
		For the year ended 30 September 2019	1 January 2018 to 30 September 2018	For the year ended 30 September 2019	1 January 2018 to 30 September 2018
Revenues					
Sales and services income		16,130,016,036	17,305,672,380	10,322,403,983	11,537,892,822
Revenue from compensating of sugar productions and distributions	13	101,861,479	472,147,801	79,596,857	372,385,940
Revenue from the Cane and Sugar Fund under the project to support sugar cane planters and sugar plants	20	162,125,257	-	128,948,609	-
Other income					
Dividend income	14	-	-	843,130,717	955,562,000
Interest income		61,012,377	30,706,427	136,167,054	97,569,819
Gain on exchange		85,214,142	50,326,171	61,257,197	54,524,849
Gain on sugar futures contracts	37	59,297,276	92,469,769	59,297,276	92,469,769
Others		286,438,730	115,816,696	190,051,030	100,082,494
Total revenues		16,885,965,297	18,067,139,244	11,820,852,723	13,210,487,693
Expenses					
Cost of sales and services		12,784,605,839	14,423,059,444	9,032,070,688	10,791,432,188
Selling expenses		1,481,101,449	1,249,071,750	1,167,164,914	958,854,129
Administrative expenses		1,452,405,960	1,289,581,938	949,516,611	829,545,617
Total expenses		15,718,113,248	16,961,713,132	11,148,752,213	12,579,831,934
Profit before share of loss of a joint venture, finance cost and income tax benefits (expenses)					
		1,167,852,049	1,105,426,112	672,100,510	630,655,759
Share of loss of a joint venture	15	(5,633,808)	-	-	-
Profit before finance cost and income tax benefits (expenses)		1,162,218,241	1,105,426,112	672,100,510	630,655,759
Finance cost		(303,179,057)	(262,448,022)	(307,984,168)	(255,281,922)
Profit before income tax benefits (expenses)		859,039,184	842,978,090	364,116,342	375,373,837
Income tax benefits (expenses)	30	(118,956,781)	(213,710,414)	15,043,767	(59,824,870)
Profit for the period		740,082,403	629,267,676	379,160,109	315,548,967
Other comprehensive income:					
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>					
Actuarial loss - net of income tax		(42,606,208)	(1,788,203)	(18,837,262)	(1,695,246)
Other comprehensive income for the period		(42,606,208)	(1,788,203)	(18,837,262)	(1,695,246)
Total comprehensive income for the period		697,476,195	627,479,473	360,322,847	313,853,721
Earnings per share					
Basic earnings per share	32				
Profit attributable to equity holders of the Company		0.19	0.16	0.10	0.08
Diluted earnings per share					
Profit attributable to equity holders of the Company		0.19	0.16	0.10	0.08

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Cash flow statement

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018
Cash flows from operating activities				
Profit before tax	859,039,184	842,978,090	364,116,342	375,373,837
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation and amortisation	1,270,364,854	964,820,023	605,220,408	469,741,965
Gain on realised discount from transferring right of planter receivables	(7,602,523)	(5,896,073)	(7,351,288)	(1,284,967)
Allowance for doubtful accounts (reversal)	(37,765,444)	85,962,685	(29,267,543)	28,670,399
Reduction cost of inventory to net realisable value (reversal)	121,694,895	(242,529,348)	70,434,832	(238,198,818)
Gain arising from change in fair value of biological assets	(5,386,471)	(10,528,109)	(4,889,920)	(4,534,584)
Unrealised loss (gain) on exchange	(707,058)	(181,587)	357,379	165,832
Share of loss from the joint venture	5,633,808	-	-	-
Loss on dissolution of company which classify as other long-term investment	-	97,365	-	58,413
Loss on impairment of investment properties	1,591,986	1,293,140	-	-
Loss on impairment of property plant and equipment	24,403,690	8,211,765	13,728,886	-
Gain on sales of investment properties	(73,075)	-	-	-
Gain on sales of plant and equipment	(4,313,726)	(4,521,192)	(14,471)	(549,595)
Loss on write-off of equipment	32,446	9,267	-	-
Long-term employee benefits expenses	115,197,232	18,785,753	67,616,445	10,515,601
Share-based payment	29,659,259	33,366,667	15,511,437	17,450,366
Dividend income	-	-	(843,130,717)	(955,562,000)
Interest income	(61,012,377)	(30,706,427)	(136,167,054)	(97,569,819)
Interest expense	303,179,057	262,448,022	307,984,168	255,281,922
Profit (loss) from operating activities before changes in operating assets and liabilities	2,613,935,737	1,923,610,041	424,148,904	(140,441,448)
Operating assets (increase) decrease				
Trade and other receivables	(318,939,795)	(413,754,847)	(323,173,193)	(218,683,579)
Planter receivables	208,088,523	(102,697,961)	162,167,617	(64,207,510)
Inventories	(347,900,993)	1,098,962,677	247,654,966	688,743,950
Biological assets	15,761,498	(19,839,460)	9,342,041	(26,842,730)
Amounts due from the Office of the Cane and Sugar Fund	(352,605,416)	(1,641,257,522)	(275,533,867)	(1,294,470,130)
Other current assets	(144,397,942)	(29,667,821)	(137,445,452)	9,012,907
Other non-current assets	(48,540,596)	27,317,149	(10,600,475)	317,473
Operating liabilities increase (decrease)				
Trade and other payables	350,555,785	(1,067,082,235)	245,181,379	(888,088,453)
Other current liabilities	(20,193,742)	2,435,616	(15,904,231)	(810,683)
Provision for employee benefits	(20,819,920)	(11,320,997)	(12,281,411)	(8,092,133)
Cash flows from (used in) operating activities	1,934,943,139	(233,295,360)	313,556,278	(1,943,562,336)
Cash paid for interest expenses	(249,788,838)	(190,657,609)	(223,614,555)	(160,568,254)
Cash paid for income tax	(136,412,213)	(124,676,361)	(3,276,735)	(2,755,647)
Net cash flows from (used in) operating activities	1,548,742,088	(548,629,330)	86,664,988	(2,106,886,237)

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Cash flow statement (continued)

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018
Cash flows from investing activities				
Decrease (increase) in short-term loans to related parties	-	-	(526,807,147)	4,444,259
Cash received from dissolution of company which classify as other long-term investment	-	34,485	-	20,697
Cash paid for investment in joint venture	(286,249,800)	-	-	-
Acquisition of investment properties	(1,376,850)	-	-	-
Proceed from sales of investment properties	190,000	-	-	-
Acquisition of property, plant and equipment	(867,153,352)	(312,624,237)	(374,850,747)	(102,272,969)
Proceed from sales of equipment	48,412,561	5,746,410	681,727	1,774,551
Cash paid for payable from purchases of property, plant and equipment	(67,737,012)	(70,243,131)	(17,706,923)	(39,148,193)
Acquisition of intangible assets	(2,867,404)	(89,674)	(2,554,772)	(240,696)
Dividends received	-	-	843,130,717	955,562,000
Interest income	58,205,516	30,644,175	132,609,463	96,716,002
Net cash flows from (used in) investing activities	(1,118,576,341)	(346,531,972)	54,502,318	916,855,651
Cash flows from financing activities				
Increase in bank overdrafts and short-term loans from financial institutions	287,988,141	1,194,908,531	284,357,760	1,795,794,879
Increase in short-term loans from related parties	-	-	182,943,699	106,237,212
Increase in short-term loans from the Office of the Cane and Sugar Fund	902,433,552	268,487,242	715,092,947	208,408,311
Cash paid for increase share capital of subsidiary	-	-	-	(10,000,000)
Increase (decrease) in long-term loans from financial institutions	(850,000,000)	199,521,352	(550,000,000)	(250,000,000)
Decrease in long-term loans from related party	(4,850,000)	(4,850,000)	-	-
Decrease in long-term loans from the Office of the Cane and Sugar Fund	(96,966,552)	(117,051,070)	(62,239,585)	(52,844,629)
Repayment of liabilities under finance lease agreements	(95,700,000)	(95,700,000)	(95,700,000)	(95,700,000)
Dividends paid	(578,972,610)	(578,949,125)	(578,972,610)	(578,949,125)
Net cash flows from (used in) financing activities	(436,067,469)	866,366,930	(104,517,789)	1,122,946,648
Net increase (decrease) in cash and cash equivalents	(5,901,722)	(28,794,372)	36,649,517	(67,083,938)
Cash and cash equivalents at beginning of period	300,866,711	329,661,083	138,400,647	205,484,585
Cash and cash equivalents at end of period	294,964,989	300,866,711	175,050,164	138,400,647
	-	-	-	-
Supplemental cash flows information:				
Non-cash items consist of				
Acquisition of property, plant and equipment for which no cash had been paid	21,227,230	67,737,012	6,067,321	17,706,923
Recognition share-based payment in investments in subsidiaries	-	-	14,147,822	15,916,301
Increase in investment properties due to collection from planter receivables	1,910,390	2,680,150	-	-
Increase in land due to collection from planter receivables	18,726,325	8,950,750	18,726,325	8,950,750
Dividend payables	183,414	156,157	183,414	156,157

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

Consolidated financial statements							(Unit: Baht)
	Issued and fully paid-up share capital	Share premium	Capital deficit from business combination under common control	Capital surplus on share-based payment	Retained earnings		Total shareholders' equity
					Appropriated - statutory reserve	Unappropriated	
For the period from 1 January 2018 to 30 September 2018							
Balance as at 1 January 2018	3,860,000,010	5,202,881,296	(3,577,165,024)	137,174,074	289,748,979	2,199,507,958	8,112,147,293
Profit for the period	-	-	-	-	-	629,267,676	629,267,676
Other comprehensive income for the period	-	-	-	-	-	(1,788,203)	(1,788,203)
Total comprehensive income for the period	-	-	-	-	-	627,479,473	627,479,473
Share-based payment (Note 27)	-	-	-	33,366,667	-	-	33,366,667
Dividend paid (Note 33)	-	-	-	-	-	(579,000,002)	(579,000,002)
Statutory reserve (Note 28)	-	-	-	-	15,777,448	(15,777,448)	-
Balance as at 30 September 2018	<u>3,860,000,010</u>	<u>5,202,881,296</u>	<u>(3,577,165,024)</u>	<u>170,540,741</u>	<u>305,526,427</u>	<u>2,232,209,981</u>	<u>8,193,993,431</u>
For the year ended 30 September 2019							
Balance as at 1 October 2018	3,860,000,010	5,202,881,296	(3,577,165,024)	170,540,741	305,526,427	2,232,209,981	8,193,993,431
Profit for the year	-	-	-	-	-	740,082,403	740,082,403
Other comprehensive income for the year	-	-	-	-	-	(42,606,208)	(42,606,208)
Total comprehensive income for the year	-	-	-	-	-	697,476,195	697,476,195
Share-based payment (Note 27)	-	-	-	29,659,259	-	-	29,659,259
Dividend paid (Note 33)	-	-	-	-	-	(578,999,867)	(578,999,867)
Statutory reserve (Note 28)	-	-	-	-	18,958,006	(18,958,006)	-
Balance as at 30 September 2019	<u>3,860,000,010</u>	<u>5,202,881,296</u>	<u>(3,577,165,024)</u>	<u>200,200,000</u>	<u>324,484,433</u>	<u>2,331,728,303</u>	<u>8,342,129,018</u>

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

Kaset Thai International Sugar Corporation Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)

Separate financial statements							(Unit: Baht)
	Issued and fully paid-up share capital	Share premium	Capital deficit from business combination under common control	Capital surplus on share-based payment	Retained earnings		Total shareholders' equity
					Appropriated - statutory reserve	Unappropriated	
For the period from 1 January 2018 to 30 September 2018							
Balance as at 1 January 2018	3,860,000,010	5,202,881,296	(573,217,706)	137,174,074	289,748,979	2,389,776,965	11,306,363,618
Profit for the period	-	-	-	-	-	315,548,967	315,548,967
Other comprehensive income for the period	-	-	-	-	-	(1,695,246)	(1,695,246)
Total comprehensive income for the period	-	-	-	-	-	313,853,721	313,853,721
Share-based payment (Note 27)	-	-	-	33,366,667	-	-	33,366,667
Dividend paid (Note 33)	-	-	-	-	-	(579,000,002)	(579,000,002)
Statutory reserve (Note 28)	-	-	-	-	15,777,448	(15,777,448)	-
Balance as at 30 September 2018	<u>3,860,000,010</u>	<u>5,202,881,296</u>	<u>(573,217,706)</u>	<u>170,540,741</u>	<u>305,526,427</u>	<u>2,108,853,236</u>	<u>11,074,584,004</u>
For the year ended 30 September 2019							
Balance as at 1 October 2018	3,860,000,010	5,202,881,296	(573,217,706)	170,540,741	305,526,427	2,108,853,236	11,074,584,004
Profit for the year	-	-	-	-	-	379,160,109	379,160,109
Other comprehensive income for the year	-	-	-	-	-	(18,837,262)	(18,837,262)
Total comprehensive income for the year	-	-	-	-	-	360,322,847	360,322,847
Share-based payment (Note 27)	-	-	-	29,659,259	-	-	29,659,259
Dividend paid (Note 33)	-	-	-	-	-	(578,999,867)	(578,999,867)
Statutory reserve (Note 28)	-	-	-	-	18,958,006	(18,958,006)	-
Balance as at 30 September 2019	<u>3,860,000,010</u>	<u>5,202,881,296</u>	<u>(573,217,706)</u>	<u>200,200,000</u>	<u>324,484,433</u>	<u>1,871,218,210</u>	<u>10,885,566,243</u>

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

Notes to consolidated financial statements

For the year ended 30 September 2019

1. General information

1.1 Corporate information

Kaset Thai International Sugar Corporation Public Company Limited is a public company incorporated and domiciled in Thailand. The Company is principally engaged in manufacture and distribution of sugar, which is sold both domestically and overseas. The registered address is as follows:

Head Office and factory: 1/1 Moo 14, Tambon Nongpo, Amphur Taklee, Nakornsawan

Bangkok branch office: 24, Ekapol Building, Viphavadee Rangsit Road, Ratchadapisek Sub-district, Dindaeng District, Bangkok.

1.2 Change accounting period

On 23 April 2018, the Annual General Meeting of the Company's shareholders passed a resolution to change the Company's fiscal year-end date from 31 December to 30 September, commencing from the period ended 30 September 2018. The first financial statements after the change in the accounting period therefore presented financial transactions as from 1 January 2018 to 30 September 2018.

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions 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 Kaset Thai International Sugar Corporation Public Company Limited ("the Company") and its subsidiaries (hereinafter called as "the Group") as following:

Company's name	Country of incorporation	Nature of business	Paid-up share capital		Percentage of shareholding	
			30 September 2019	30 September 2018	30 September 2019	30 September 2018
					Percent	Percent
Held by the Company						
Thai Identity Sugar Factory Co., Ltd.	Thailand	Manufacture and distribution of sugar	1,215 Million Baht	1,215 Million Baht	100	100
Pernsin Pattana Co., Ltd.	Thailand	Investment company	317 Million Baht	317 Million Baht	100	100
Kaset Thai Bio Power Co., Ltd.	Thailand	Manufacture and distribution of electricity	1,260 Million Baht	1,260 Million Baht	100	100
Environment Pulp and Paper Co., Ltd.	Thailand	Manufacture and distribution of pulp	2,400 Million Baht	2,400 Million Baht	74	74
KTIS Bio Ethanol Co., Ltd.	Thailand	Manufacture and distribution of ethanol	256 Million Baht	256 Million Baht	100	100
Sapsirikaset Co., Ltd.	Thailand	Property rental and trading	311 Million Baht	311 Million Baht	100	100
Thaiekaluck Power Co., Ltd.	Thailand	Manufacture and distribution of electricity	350 Million Baht	350 Million Baht	100	100
Ruamphol Bio Power Co., Ltd.	Thailand	Manufacture and distribution of electricity	395 Million Baht	395 Million Baht	100	100
KTIS Biogass Power Co., Ltd.	Thailand	Manufacture and distribution of electricity	1 Million Baht	1 Million Baht	100	100
KTIS Bio Energy Co., Ltd.	Thailand	Manufacture and distribution of ethanol and electricity	20 Million Baht	20 Million Baht	100	100
Kaset Thai Wiwat Co., Ltd.	Thailand	Management of assets	61 Million Baht	61 Million Baht	100	100
KTIS Research and Development Co., Ltd.	Thailand	Research and development	20 Million Baht	20 Million Baht	100	100
Lopburi Bioethanol Co., Ltd.	Thailand	Manufacture and distribution of ethanol and electricity	12.50 Million Baht	12.50 Million Baht	98	98
Held by subsidiaries						
Environment Pulp and Packaging Co., Ltd. (formerly known as "Lopburi International Sugar Co., Ltd.") (held by Environment Pulp and Paper Co., Ltd.)	Thailand	Manufacture and distribution of containers made from bagasse	650 Million Baht	2 Million Baht	100	100
Lopburi Biopower Co., Ltd. (held by Pernsin Pattana Co., Ltd.)	Thailand	Manufacture and distribution of electricity	2 Million Baht	2 Million Baht	100	100
Lopburi Bioethanol Co., Ltd. (held by Pernsin Pattana Co., Ltd.)	Thailand	Manufacture and distribution of ethanol and electricity	12.50 Million Baht	12.50 Million Baht	2	2
Environment Pulp & Paper Co., Ltd. (held by Pernsin Pattana Co., Ltd.)	Thailand	Manufacture and distribution of pulp	2,400 Million Baht	2,400 Million Baht	26	26
KTIS Bio Fertiliser Co., Ltd. (held by KTIS Bio Ethanol Co., Ltd.)	Thailand	Manufacture and distribution of organic fertiliser	35 Million Baht	35 Million Baht	100	100

- b) During the current year, there was change in the composition of the Group as follow:

Newly established joint venture

Company's name	Country of incorporation	Nature of business	Paid-up share capital	Percentage of shareholding Percent
Held by subsidiary				
(held by KTIS Bio Ethanol Co., Ltd.)				
GGC KTIS Bioindustrial Co., Ltd.	Thailand	Manufacture and distribution of ethanol	573 Million Baht	50

- c) 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.
- d) 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.
- e) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
- f) Material balances and transactions between the Company and its subsidiary companies have been eliminated from the consolidated financial statements.

2.3 The separate financial statements present investments in subsidiaries under the cost method.

3. New financial reporting standards

(a) Financial reporting standards that became effective in the current year

During the year, the Group has 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 Group's financial statements.

(b) Financial reporting standards that 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 Group believes 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 recognized 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 Group is currently evaluating the impact of this standard to the financial statements in the year when it is adopted.

(c) Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2020

The Federation of Accounting Professions issued a number of new and revised financial reporting standards and interpretations, which are effective for fiscal years beginning on or after 1 January 2020. 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 except the following new standards which involve changes to key principles, which are summarised below.

Financial reporting standards related to financial instruments

A set of TFRSs related to financial instruments 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 Group is currently evaluating the impact of these standards to the financial statements in the year when they are adopted.

TFRS 16 Leases

TFRS 16 supersedes TAS 17 Leases together with related Interpretations. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases, and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is low value.

Accounting by lessors under TFRS 16 is substantially unchanged from TAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles to those used under TAS 17.

The management of the Group is currently evaluating the impact of this standard on the financial statements in the year when it is adopted.

4. Significant accounting policies

4.1 Revenue recognition

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.

Rendering of services

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

Interest income

Interest income is recognised on an accrual basis based on the effective interest rate.

Dividends

Dividends are recognised when the right to receive the dividends is established.

4.2 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.

4.3 Trade and planter receivables

Trade and planter receivables are stated at the net realisable value. Allowance for doubtful accounts is provided for the estimated losses that may be incurred in collection of receivables. The allowance is generally based on collection experience and analysis of debt aging.

The Group purchased non-performing planter receivables from related company at discounted values for debts management and collection. Under the purchase contracts of non-performing receivables, the Group takes all the risks in the collection without recourse. The Group recorded these planter receivables at cost and recorded the discounted values in “Discounts from transfer right of planter receivables”.

4.4 Inventories

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

Merchandise inventories are valued at the lower of cost under the first-in, first-out method and net realisable value.

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

4.5 Agriculture

The Group’s biological asset is sugar cane and agricultural produce is harvested cane which were measured at their fair value less costs to sell at the point of harvest.

The fair value of cane is determined based on reference to fair value less estimated point-of-harvest costs. Gains or losses arising from change in fair value of biological asset and agricultural produce are recognised in profit or loss.

In case the fair value cannot be measured reliably, this biological asset shall be measured at its cost less any accumulated depreciation and any accumulated impairment losses. Once the fair value of such a biological asset becomes reliably measurable, the Group shall measure it at its fair value less costs to sell.

4.6 Factory overhaul costs

Factory overhaul costs comprise expenditure actually incurred on plant and equipment for the overhaul of the factory within the off season for production which preparation for the new sugar season. The factory overhaul costs are amortised on a systematic basis over the economic useful life being the duration of next production season. The amortisation expense is charged to profit or loss.

4.7 Investments

- a) Investments in non-marketable equity securities, which the Group classifies as other investments, are stated at cost net of allowance for impairment loss (if any).
- b) Investment in joint venture is accounted for in the consolidated financial statements using the equity method.
- c) Investments in subsidiaries are accounted for in the separate financial statements using the cost method net of allowance for impairment loss (if any).

The weighted average method is used for computation of the cost of investments.

4.8 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at cost less accumulated depreciation and allowance for loss on impairment (if any).

Depreciation of investment properties is calculated by reference to their costs on the straight-line basis over estimated useful lives of 10 years. Depreciation of the investment properties is included in determining income.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.

4.9 Property, plant and equipment/Depreciation

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

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

Land improvement	5 - 27 years
Buildings and building improvement	5 - 30 years
Machinery and equipment	5 - 25 years
Agricultural tools and equipment	5 years
Furniture, fixtures and office equipment	5 years
Motor vehicles	5 - 10 years

Depreciation is included in determining income.

No depreciation is provided on land and assets under installation and under construction.

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.

4.10 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.11 Intangible assets

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
Trademark	10 years
Right to use of electricity line	20 years

No amortisation is provided on computer software under installation.

4.12 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.

4.13 Long-term leases

Leases of property, plant and equipment which transfer substantially all the risks and rewards of ownership are classified as finance leases. Finance 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 long-term payables, while the interest element is charged to profit or loss over the lease period. The assets acquired under finance leases is depreciated over the shorter of the useful life of the assets and the lease period.

Leases of property, plant and 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.

4.14 Foreign currencies

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

4.15 Impairment of assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment and other assets whenever events or changes in circumstances indicate that an asset may be impaired. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount. In determining value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that, based on information available, reflects the amount that the Group could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

An impairment loss is recognised in profit or loss.

4.16 Employee benefits

Short-term employee benefits

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

Post-employment benefits and other long-term employee benefits

Defined contribution plans

The Group and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Group. The fund's assets are held in a separate trust fund and the contributions of the Group is recognised as expenses when incurred.

Defined benefit plans and other long-term employee benefits

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law and other employee benefit plan. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Group provides other long-term employee benefit plan, namely death benefit plan.

The obligation under the defined benefit plans and other long-term employee benefit plan 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 benefit 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 Group recognises restructuring-related cost.

4.17 Share-based Payment

The Company operates a number of equity-settled, share-based compensation plans, under which the entity receives services from employees as consideration for equity instruments (options) of the entity. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted:

- including any market performance conditions;
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified time period); and

- excluding the impact of any non-vesting conditions (for example, the requirement for employees to save).

Non-market performance and service conditions are included in assumptions about the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each reporting period, the Company revises its estimates of the number of options that are expected to vest based on the non-marketing vesting conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

When the options are exercised, the Company will issue new shares. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

The grant by the Company of options over its equity instruments to the employees of subsidiary is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary, in the separate financial statement undertakings, with a corresponding credit to equity.

4.18 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The Group recognises a provision for decommissioning costs based on an estimate of the eventual costs that related to the remove of the plant and equipment which payment as of termination of lease agreement. These obligations, add of finance charges, are included in long-term liabilities.

4.19 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while 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 Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.20 Capital deficit from business combination under common control

The Company has recorded subsidiaries assets by using similar to pooling interest method from the acquisition and entire business transfer of subsidiaries under common control. Capital deficit from business combination under common control is presented in shareholder's equity in the statement of financial position as at the business combination date by recording the difference between the purchased price and the carrying amount on the purchased date.

4.21 Interest rate swap contracts

The net amount of interest to be received from or paid to the counterparty under an interest rate swap contract is recognised as income or expenses on an accrual basis.

4.22 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 at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation techniques that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an observable active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting 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:

Allowance for doubtful planter receivables

In determining an allowance for doubtful planter receivables, the management needs to make judgement and estimates based upon, among other things, past collection history, aging profile of outstanding debts and the prevailing economic condition.

Reduce inventories cost to net realisable value

In determining a reduction of inventories cost to net realisable value, the management makes judgement and estimates net realisable value of inventories based on the amount of the inventories are expected to realise. These estimates take into consideration sale contract, fluctuations of selling price or cost directly relating to events occurring after the end of the reporting period. Also, the management makes judgement and estimates the expected loss from stock obsolescence based upon aging profile of inventories and the prevailing economic condition.

Property plant and equipment/Depreciation

In determining depreciation of plant and equipment, the management is required to make estimates of the useful lives and residual values of the plant and equipment and to review estimate useful lives and residual values when there are any changes.

In addition, the management is required to review property, plant and equipment for impairment on a periodical basis and record impairment losses when it is determined that their recoverable amount is lower than the carrying amount. This requires judgements regarding forecast of future revenues and expenses relating to the assets subject to the review.

Deferred tax assets

Deferred tax assets are recognised for deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the temporary differences and losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of estimate future taxable profits.

Cost of sugar cane

The recognition of cost of sugar cane, requires management to make estimates of the sugar cane price by reference to the calculation method of the Office of the Cane and Sugar Board. Such determination is made based on various assumptions, including sale forecast and exchange rate.

Post-employment benefits under defined benefit plans

The obligation under the defined benefit plan 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. Seasonality of operations

The operations of the Group, which are principally engaged in the manufacture and distribution of sugar, are affected by the seasonality of sugar manufacture, with the production season running from November to April, and the off season for production running from May to October.

7. Related party transactions

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

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements		Transfer Pricing Policy
	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018	For the year ended 30 September 2019	For the period from 1 January 2018 to 30 September 2018	

Transaction with subsidiary

companies

(eliminated from the consolidated
financial statements)

Sales of goods and services	-	-	1,167	1,259	Contract price
Dividend income	-	-	843	956	As declared
Interest income	-	-	86	74	3.00% per annum
Other income	-	-	30	20	Mutual agreement
Purchases of goods and services	-	-	564	934	Contract price
Administrative expenses	-	-	10	11	Mutual agreement
Interest expenses	-	-	20	12	1.05% to 3.95% per annum

Transactions with related

companies

Purchases of goods and services	326	277	195	170	Mutual agreement
Selling expenses	359	339	238	240	Mutual agreement
Administrative expenses	47	40	21	14	Mutual agreement
Interest expenses	87	66	87	66	0.42% and 11.00% per annum

As at 30 September 2019 and 2018, the Group had outstanding balance of assets and liabilities with the related parties as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Trade and other receivables - related parties				
Subsidiaries	-	-	145,677	64,622
Related companies (common shareholder/director)	8,302	8,763	52	8,349
Total trade and other receivables - related parties	8,302	8,763	145,729	72,971
Short-term loans to related parties				
Subsidiaries	-	-	3,044,327	2,517,520
Total short-term loans to related parties	-	-	3,044,327	2,517,520
Other current assets - related parties				
Related companies (common shareholder/director)	10,326	6,650	7,302	5,460
Total other current assets - related parties	10,326	6,650	7,302	5,460
Other non-current assets - related parties				
Related companies (common shareholder/director)	104,435	104,322	103,429	103,027
Total other non-current assets - related parties	104,435	104,322	103,429	103,027
Trade and other payables - related parties				
Subsidiaries	-	-	54,316	35,990
Related companies (common shareholder/director)	115,248	92,378	50,233	32,015
Total trade and other payables - related parties	115,248	92,378	104,549	68,005
Short-term loans from related parties				
Subsidiaries	-	-	1,729,107	1,546,163
Total short-term loans from related parties	-	-	1,729,107	1,546,163
Other current liabilities - related party				
Related company (common shareholder/director)	25	496	25	496
Total other current liabilities - related party	25	496	25	496
Long-term loans from related party				
Related company (common shareholder/director)	67,900	72,750	-	-
Total long-term loans from related party	67,900	72,750	-	-
Other non-current liabilities - related party				
Related company (common shareholder/director)	479,154	508,867	-	-
Total other non-current liabilities - related party	479,154	508,867	-	-

Short-term loans to related parties

During the year ended 30 September 2019, movements of the short-term loans to related parties are summarised below.

(Unit: Thousand Baht)

	Separate financial statements
Balance as at 1 October 2018	2,517,520
Increase during the year	4,551,312
Collection during the year	(4,024,505)
Balance as at 30 September 2019	3,044,327

The balances of short-term loans to related parties as at 30 September 2019 and 2018 are as follows:

(Unit: Thousand Baht)

	Separate financial statements	
	2019	2018
Subsidiary companies		
Thai Identity Sugar Factory Co., Ltd.	2,446,258	1,905,110
Thaiekaluck Power Co., Ltd.	594,369	553,573
Ruamphol Bio Power Co., Ltd.	-	52,237
Sapsirikaset Co., Ltd.	3,700	6,600
Total short-term loans to related parties	3,044,327	2,517,520

As at 30 September 2019 and 2018, short-term loans to related parties carried interest at rates of 3.00% per annum with repayment at call.

Short-term loans from related parties

During the year ended 30 September 2019, movements of the short-term loans from related parties are summarised below.

(Unit: Thousand Baht)

	Separate financial statements
Balance as at 1 October 2018	1,546,163
Increase during the year	3,628,182
Repayment during the year	(3,445,238)
Balance as at 30 September 2019	1,729,107

The balances of short-term loans from related parties as at 30 September 2019 and 2018 are as follows:

(Unit: Thousand Baht)

	Separate financial statements	
	2019	2018
Subsidiary companies		
Environment Pulp & Paper Co., Ltd.	675,013	791,568
KTIS Bio Ethanol Co., Ltd.	9,100	95,500
Kaset Thai Bio Power Co., Ltd.	834,182	593,295
Permsin Pattana Co., Ltd.	6,100	11,150
KTIS Bio Energy Co., Ltd.	11,930	11,680
KTIS Research and Development Co., Ltd.	20,950	17,450
KTIS Biogass Power Co., Ltd.	570	620
Kaset Thai Wiwat Co., Ltd.	15,000	13,000
Lopburi Bio Ethanol Co., Ltd.	12,100	11,900
Ruamphol Bio Power Co., Ltd.	144,162	-
Total short-term loans from related parties	1,729,107	1,546,163

As at 30 September 2019 and 2018, short-term loans from related parties carried interest at rates of 1.05% to 3.95% per annum with repayment at call.

Long-term loans from related party

As at 30 September 2019 and 2018, long-term loans from related party are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements	
	2019	2018
Long-term loans	67,900	72,750
Less: Portion due within one year	(4,850)	(4,850)
Long-term loans from related party - net of current portion	<u>63,050</u>	<u>67,900</u>

During the year ended 30 September 2019, movements of the long-term loans from related party are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements
Balance as at 1 October 2018	72,750
Repayment during the year	<u>(4,850)</u>
Balance as at 30 September 2019	<u>67,900</u>

The balances of long-term loans from related party as at 30 September 2019 and 2018 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements	
	2019	2018
Related company		
Siricharoen Export Co., Ltd.	<u>67,900</u>	<u>72,750</u>
Total long-term loans from related party	<u>67,900</u>	<u>72,750</u>

As at 30 September 2019 and 2018, long-term loans from related party carried interest at a rate referenced bank deposit in saving accounts.

Directors and management's benefits

During the year ended 30 September 2019 and the period from 1 January 2018 to 30 September 2018, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Short-term employee benefits	44,843	34,590	42,083	32,520
Post-employment benefits	5,859	469	5,859	469
Share-based payment	911	683	911	683
Total	<u>51,613</u>	<u>35,742</u>	<u>48,853</u>	<u>33,672</u>

8. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Cash	3,176	3,270	978	960
Cheque on hand	5,441	10,391	5,441	10,391
Bank deposits	<u>286,348</u>	<u>287,206</u>	<u>168,631</u>	<u>127,050</u>
Total	<u>294,965</u>	<u>300,867</u>	<u>175,050</u>	<u>138,401</u>

As at 30 September 2019, bank deposits in saving accounts carried interests between 0.37% and 0.38% per annum (2018: between 0.37% and 0.38% per annum).

9. Trade and other receivables

The balances of trade and other receivables as at 30 September 2019 and 2018, aged on the basis of due dates, are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Trade receivables - related parties				
Aged on the basis of due dates				
Not yet due	8,238	8,438	35,462	45,416
Past due				
Up to 3 months	-	3	98,440	17,339
Total trade receivables - related parties	8,238	8,441	133,902	62,755
Trade receivables - unrelated parties				
Aged on the basis of due dates				
Not yet due	1,025,879	546,720	550,312	136,131
Past due				
Up to 3 months	95,617	230,907	38,780	147,035
3 - 6 months	-	63	-	-
6 - 12 months	-	10	-	-
Over 12 months	102	104	-	-
Total	1,121,598	777,804	589,092	283,166
Less: Allowance for doubtful debts	(102)	(104)	-	-
Total trade receivables - unrelated parties, net	1,121,496	777,700	589,092	283,166
Total trade receivables - net	1,129,734	786,141	722,994	345,921
Other receivables				
Advances	32,278	32,721	29,224	29,238
Interest receivables - related parties	-	-	8,329	6,969
Interest receivables - unrelated parties	88	69	10	12
Accrued income - unrelated parties	145,433	170,240	38,972	94,486
Other receivables - related parties	64	322	3,498	3,247
Other receivables - unrelated parties	2,074	1,510	1,118	112
Total other receivables	179,937	204,862	81,151	134,064
Total trade and other receivables - net	1,309,671	991,003	804,145	479,985

10. Planter receivables

Planter receivables for the Group compose two types as follows:

10.1 Planter receivables - encourage

These are receivables relating to financial support provided by the Group to planters to cover expenses incurred directly in relation to the cultivation of sugar cane and expenses that are necessary to the planting of sugar cane, such as financial support for labour, fertilizer and pesticide costs.

10.2 Planter receivables - support

There are receivables relating to financial support provided by the Group to planters to provide financial support for efficient planting and the cultivation of sugar cane, such as for water resource management projects and agricultural machinery.

The balances of planter receivables and non-performing planter receivables purchased for debt management and collection as at 30 September 2019 and 2018, aged on the basis of due dates, are summarised below.

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
Not yet due	376,855	467,144	248,893	302,684
Past due				
Up to 1 year	14,607	107,677	10,478	100,962
1 - 5 years	44,021	75,658	38,694	68,750
Over 5 years	650,548	664,278	378,918	385,480
	709,176	847,612	428,090	555,192
Total	1,086,031	1,314,757	676,983	857,876
Less: Discounts from transfer right				
of planter receivables	(278,878)	(286,480)	(212,945)	(220,296)
Allowance for doubtful debts	(415,691)	(453,456)	(204,667)	(233,934)
Planter receivables, net	391,462	574,821	259,371	403,646

11. Inventories

(Unit: Thousand Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2019	2018	2019	2018	2019	2018
Raw material	20,216	9,740	-	-	20,216	9,740
Finished goods	3,387,024	3,115,386	(345,199)	(223,263)	3,041,825	2,892,123
Merchandise inventories	34,246	29,774	-	-	34,246	29,774
Spare parts, factory supplies and supplies	346,933	280,292	(39,384)	(39,626)	307,549	240,666
Work in process	13,402	18,729	-	-	13,402	18,729
Total	3,801,821	3,453,921	(384,583)	(262,889)	3,417,238	3,191,032

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2019	2018	2019	2018	2019	2018
Finished goods	1,730,391	2,039,143	(126,313)	(53,476)	1,604,078	1,985,667
Merchandise inventories	31,484	33,849	-	-	31,484	33,849
Spare parts, factory supplies and supplies	159,672	96,210	(12,625)	(15,027)	147,047	81,183
Total	1,921,547	2,169,202	(138,938)	(68,503)	1,782,609	2,100,699

Below is the movements in the allowance for diminution in value of inventory account for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 by significant segment.

(Unit: Thousand Baht)

	Production and distribution of sugar segment	Other segments	Consolidation
Balance as at 1 January 2018	489,899	15,519	505,418
Add: Increase during the period	2,164,548	3,570	2,168,118
Less: Allowance reversed during the period	(2,410,548)	(99)	(2,410,647)
Balance as at 30 September 2018	243,899	18,990	262,889
Add: Increase during the year	1,820,899	7,693	1,828,592
Less: Allowance reversed during the year	(1,706,144)	(754)	(1,706,898)
Balance as at 30 September 2019	358,654	25,929	384,583

Loss on diminution in value of inventories was included in cost of sales. The reversal of allowance for diminution in value of inventories was recorded as a deduction against the value of inventories recognised as expenses during the period.

12. Biological assets

Movements of the biological assets account for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 are summarised below.

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
Balance at beginning of period	57,855	27,487	41,434	10,057
Increases due to cultivate	42,092	44,959	32,092	34,532
Gain (loss) arising from changes in fair value	(8,184)	27,060	(9,657)	19,445
Decreases due to harvest	(44,284)	(41,651)	(26,887)	(22,600)
Balance at end of period	<u>47,479</u>	<u>57,855</u>	<u>36,982</u>	<u>41,434</u>

13. Amounts due from the Office of the Cane and Sugar Fund

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
Amounts due from the Office of the Cane and Sugar Fund				
Receivable from sugar cane price	1,419,854	1,169,110	1,118,021	922,084
Receivable from compensation for production and distribution of sugar	<u>576,798</u>	<u>472,148</u>	<u>454,182</u>	<u>372,386</u>
Total amounts due from the Office of the Cane and Sugar Fund	1,996,652	1,641,258	1,572,203	1,294,470
Less: Current portion of amounts due from the Office of the Cane and Sugar Fund	<u>(1,419,854)</u>	<u>(1,169,110)</u>	<u>(1,118,021)</u>	<u>(922,084)</u>
Amounts due from the Office of the Cane and Sugar Fund - net of current portion	<u><u>576,798</u></u>	<u><u>472,148</u></u>	<u><u>454,182</u></u>	<u><u>372,386</u></u>

Amounts due from the Office of the Cane and Sugar Fund were amounts that the Group will reimburse from the Cane and Sugar Fund, since the Group expects that in the 2017/2018 and 2018/2019 harvesting years the final sugar cane price and the final compensation for the production and distribution of sugar will be less than the initial sugar cane price and the initial compensation for the production and distribution of sugar. In accordance with Section 56 of the Cane and Sugar Act B.E. 2527, the Cane and Sugar Fund is to pay compensation to the Group at an amount equal to the difference, and the sugar cane planters do not have to return the excess amount of the sugar cane price received.

During the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018, the Group recorded its estimate of compensation for sugar cane price as a deduction against manufacturing costs and recorded its estimate of compensation for the production and distribution of sugar as revenue.

The Group expects the Cane and Sugar Fund to finalize the calculation and pay compensation for the sugar cane price in the next fiscal year. The Group therefore classified compensation expected to be received in the next fiscal year of Baht 1,420 million (the Company only: Baht 1,118 million) as “Current portion of amounts due from the Office of the Cane and Sugar Fund”. In addition, the Group expects the Cane and Sugar Fund to finalize the calculation and pay compensation for the production and distribution of sugar within 3 years. The Group therefore recorded its estimate of the compensation to be received in the future using a discount rate equal to the average interest rate on loans of the Group, and classified the compensation as “Amount due from the Office of the Cane and Sugar Fund” under non-current assets.

The estimates of the final sugar cane price and compensation for the production and distribution of sugar are management’s best estimates, but the final calculation is to be made by the Cane and Sugar Board. As a result, the final sugar cane price and compensation for the production and distribution of sugar that expect to be announced at the beginning of 2020 may differ from these estimates.

14. Investments in subsidiaries

14.1 Investments in subsidiaries are investments in ordinary shares of the following subsidiary companies.

(Unit: Thousand Baht)

Separate financial statements								
Company's name	Cost		Provision for impairment		Carrying amounts based on cost		Dividend received during the year ended 30 September	Dividend received during the period from 1 January 2018 to 30 September
	2019	2018	2019	2018	2019	2018	2019	2018
Thai Identity Sugar Factory Co., Ltd.	1,269,853	1,261,726	-	-	1,269,853	1,261,726	-	-
Permsin Pattana Co., Ltd.	1,010,905	1,010,905	-	-	1,010,905	1,010,905	68,155	110,189
Kaset Thai Bio Power Co., Ltd.	2,461,000	2,460,588	-	-	2,461,000	2,460,588	378,000	140,490
Environment Pulp and Paper Co., Ltd.	2,668,873	2,664,920	-	-	2,668,873	2,664,920	179,376	333,888
KTIS Bio Ethanol Co., Ltd.	870,946	869,422	-	-	870,946	869,422	217,600	370,995
Sapsirikaset Co., Ltd.	311,000	311,000	-	-	311,000	311,000	-	-
Thaiekaluck Power Co., Ltd.	350,077	350,062	-	-	350,077	350,062	-	-
Ruamphol Bio Power Co., Ltd.	395,784	395,668	-	-	395,784	395,668	-	-
KTIS Biogas Power Co., Ltd.	1,000	1,000	-	-	1,000	1,000	-	-
KTIS Bio Energy Co., Ltd.	20,000	20,000	(10,000)	(10,000)	10,000	10,000	-	-
Kaset Thai Wiwat Co., Ltd.	61,000	61,000	-	-	61,000	61,000	-	-
KTIS Research and Development Co., Ltd.	19,999	19,999	-	-	19,999	19,999	-	-
Lopburi Bioethanol Co., Ltd.	12,250	12,250	-	-	12,250	12,250	-	-
Total	9,452,687	9,438,540	(10,000)	(10,000)	9,442,687	9,428,540	843,131	955,562

14.2 Change in investment in subsidiary during the period from 1 January 2018 to 30 September 2018

On 26 January 2018, KTIS Research and Development Co., Ltd., a subsidiary, registered the increase in its share capital from Baht 10 million (100,000 ordinary shares at a par value of Baht 100 each) to Baht 20 million (200,000 ordinary shares at a par value of Baht 100 each). The Company paid for the increased shares at the same proportion of the original investment, totaling Baht 10 million.

14.3 Change in investment in subsidiary during the year 2019

On 8 July 2019, Environment Pulp and Packaging Co., Ltd. (formerly known as "Lopburi International Sugar Co., Ltd."), a subsidiary that was originally held by Environment Pulp and Paper Co., Ltd. (subsidiary of the Company), registered an increase in its share capital from Baht 2 million (20,000 ordinary shares at a par value of Baht 100 each) to Baht 652 million (6,520,000 ordinary shares at a par value of Baht 100 each). Environment Pulp and Paper Co., Ltd. paid for the increased shares at the same proportion of the original investment, totaling Baht 650 million.

On 25 July 2019, the Extraordinary General Meeting of Shareholders of Environment Pulp and Packaging Co., Ltd., approved a reduction of the company's registered capital from Baht 652 million (6,520,000 ordinary shares at a par value of Baht 100 each) to Baht 650 million (6,500,000 ordinary shares at a par value of Baht 100 each) and registered its capital decrease with the Ministry of Commerce on 27 August 2019.

14.4 During the year ended 30 September 2019 the Company recognized share-based payment transactions amounting to Baht 14 million (during the period from 1 January 2018 to 30 September 2018: Baht 16 million) as investments in subsidiaries. The transactions were recognised when services were rendered by the subsidiaries' employees.

15. Investment in joint venture

15.1 Details of investment in joint venture

Investment in joint venture represents investment in entity which is jointly controlled by the Group and other company. Details of this investment are as follows:

(Unit: Thousand Baht)

Consolidated financial statements							
Joint venture	Nature of business	Shareholding percentage		Carrying amount based on equity method		Carrying amount based on cost method	
		2019	2018	2019	2018	2019	2018
		(%)	(%)				
GGC KTIS Bioindustrial Co., Ltd.	Manufacture and distribution of ethanol	50	-	280,616	-	286,250	-
Total				280,616	-	286,250	-

On 11 January 2019, KTIS Bioethanol Co., Ltd., a subsidiary, invested in the ordinary shares of GGC KTIS Bioindustrial Co., Ltd. amounting to Baht 30 million, which is 50 percent.

On 23 April 2019, GGC KTIS Bioindustrial Co., Ltd., registered an increase in its share capital from Baht 60 million (600,000 ordinary shares at a per value of Baht 100 each) to Baht 360 million (3,600,000 ordinary shares at a par value of Baht 100 each). KTIS Bio Ethanol Co., Ltd. paid for the increased shares at the same proportion of the original investment, totaling Baht 150 million.

On 22 July 2019, GGC KTIS Bioindustrial Co., Ltd., registered an increase in its share capital from Baht 360 million (3,600,000 ordinary shares at a per value of Baht 100 each) to Baht 530 million (5,300,000 ordinary shares at a par value of Baht 100 each). KTIS Bio Ethanol Co., Ltd. paid for the increased shares at the same proportion of the original investment, totaling Baht 85 million.

On 10 September 2019, GGC KTIS Bioindustrial Co., Ltd., registered an increase in its share capital from Baht 530 million (5,300,000 ordinary shares at a per value of Baht 100 each) to Baht 700 million (7,000,000 ordinary shares at a par value of Baht 100 each), of which 25 percent was called up. KTIS Bio Ethanol Co., Ltd. paid for the increased shares at the same proportion of the original investment, totaling Baht 21 million.

15.2 Share of comprehensive income and dividend received

During the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018, the Group recognised its share of comprehensive income from the joint venture in the consolidated financial statements as follows:

Joint venture	(Unit: Thousand Baht)	
	Consolidated financial statements	
	2019	2018
GGC KTIS Bioindustrial Co., Ltd.	(5,634)	-
Total	(5,634)	-

During the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018, the Group did not have dividend income from the joint venture.

15.3 Summarised financial information of the joint venture

Summarised information about financial position as at 30 September 2019.

	(Unit: Thousand Baht)
Cash and cash equivalents	285,577
Other current assets	13,288
Non-current assets	271,555
Total assets	570,420
Other current liabilities	7,022
Other non-current liabilities	2,166
Total liabilities	9,188
Net assets	561,232
Shareholding percentage (%)	50
Share of net assets	280,616
Elimination entries	-
Carrying amounts of joint venture based on equity method	280,616

Summarised information about comprehensive income for the year ended 30 September 2019

(Unit: Thousand Baht)

Revenue	254
Net loss	(11,268)
Other comprehensive income	-
Total comprehensive income	(11,268)

16. Investment properties

The net book value of investment properties as at 30 September 2019 and 2018 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements
	Land awaiting sales	Office building for rent	Total	Land awaiting sales
As at 30 September 2019				
Cost	349,474	1,570	351,044	24,910
Less: Accumulated depreciation	-	(1,032)	(1,032)	-
Less: Allowance for impairment loss	(26,271)	-	(26,271)	(12,532)
Net book value	<u>323,203</u>	<u>538</u>	<u>323,741</u>	<u>12,378</u>
As at 30 September 2018				
Cost	346,303	1,570	347,873	24,910
Less: Accumulated depreciation	-	(875)	(875)	-
Less: Allowance for impairment loss	(24,679)	-	(24,679)	(12,532)
Net book value	<u>321,624</u>	<u>695</u>	<u>322,319</u>	<u>12,378</u>

A reconciliation of the net book value of investment properties for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Net book value at beginning of period	322,319	321,050	12,378	12,378
Acquisition	3,287	2,680	-	-
Disposals - net book value at disposal date	(117)	-	-	-
Depreciation charged	(156)	(118)	-	-
Impairment	(1,592)	(1,293)	-	-
Net book value at end of period	<u>323,741</u>	<u>322,319</u>	<u>12,378</u>	<u>12,378</u>

The fair value of the investment properties as at 30 September 2019 and 2018 stated below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Land awaiting sales	392,761	391,107	15,953	15,953
Office building for rent	3,196	3,196	-	-

The fair values of investment properties are measured by independent valuers, using the net replacement cost method and the comparative price method. Sales prices of comparable land and buildings in close proximity are adjusted for differences in key attributes such as property size and the locations of the investment properties.

17. Property, plant and equipment

(Unit: Thousand Baht)

	Consolidated financial statements						
	Land and land improvement	Buildings and building improvement	Machinery and equipment	Agricultural tools and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction
Cost							Total
As at 1 January 2018	427,435	2,672,810	12,996,987	507,192	174,810	1,170,569	18,969,268
Additions	9,400	22,062	110,472	26,313	7,975	25,341	389,312
Disposals/ write-off	-	-	(1,708)	(219)	(107)	(11,798)	(13,832)
Transfer in (out)	40,758	30,943	247,636	744	2,955	-	-
As at 30 September 2018	477,593	2,725,815	13,353,387	534,030	185,633	1,184,112	19,344,748
Additions	19,226	11,849	60,537	35,125	8,713	242,323	907,107
Disposals/ write-off	-	(47)	(1,559)	(1,188)	(707)	(50,104)	(53,605)
Transfer in (out)	22,402	116,779	152,482	317	49	-	-
As at 30 September 2019	519,221	2,854,396	13,564,847	568,284	193,688	1,376,331	20,198,250
Accumulated depreciation							
As at 1 January 2018	90,481	816,097	6,341,977	373,911	137,175	582,454	8,342,095
Depreciation for the period	12,047	112,492	698,276	39,394	11,831	78,125	952,165
Depreciation on disposals/ write-off	-	-	(1,650)	(219)	(97)	(10,631)	(12,597)
As at 30 September 2018	102,528	928,589	7,038,603	413,086	148,909	649,948	9,281,663
Depreciation for the year	15,525	156,716	898,998	47,591	14,274	120,299	1,253,403
Depreciation on disposals/ write-off	-	(5)	(1,188)	(825)	(695)	(6,761)	(9,474)
As at 30 September 2019	118,053	1,085,300	7,936,413	459,852	162,488	763,486	10,525,592

Depreciation

(Unit: Thousand Baht)

	Separate financial statements							
	Land and land improvement	Buildings and building improvement	Machinery and equipment	Agricultural tools and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction	Total
Cost								
As at 1 January 2018	190,541	1,041,136	4,033,397	280,689	64,614	577,848	292,961	6,481,186
Additions	9,402	5,734	22,046	14,216	2,431	16,442	58,660	128,931
Disposals/ write-off	-	-	(1,159)	(125)	-	(1,341)	-	(2,625)
Transfer in (out)	31,739	18,478	154,214	609	-	-	(205,040)	-
As at 30 September 2018	231,682	1,065,348	4,208,498	295,389	67,045	592,949	146,581	6,607,492
Additions	19,226	9,073	51,378	20,206	3,856	125,521	170,384	399,644
Disposals/ write-off	-	-	(1,559)	(839)	(346)	(1,120)	-	(3,864)
Transfer in (out)	22,402	86,849	30,622	-	-	-	(139,873)	-
As at 30 September 2019	273,310	1,161,270	4,288,939	314,756	70,555	717,350	177,092	7,003,272
Accumulated depreciation								
As at 1 January 2018	15,146	262,300	1,741,983	196,514	48,937	231,847	-	2,496,727
Depreciation for the period	4,699	58,959	333,486	23,239	5,326	43,643	-	469,352
Depreciation on disposals/ write-off	-	-	(1,101)	(125)	-	(174)	-	(1,400)
As at 30 September 2018	19,845	321,259	2,074,368	219,628	54,263	275,316	-	2,964,679
Depreciation for the year	7,896	84,475	408,237	29,563	5,922	68,810	-	604,903
Depreciation on disposals/ write-off	-	-	(1,188)	(543)	(346)	(1,120)	-	(3,197)
As at 30 September 2019	27,741	405,734	2,481,417	248,648	59,839	343,006	-	3,566,385

(Unit: Thousand Baht)

	Separate financial statements (continued)						
	Land and land improvement	Buildings and building improvement	Machinery and equipment	Agricultural tools and equipment	Furniture, fixtures and office equipment	Motor vehicles	Assets under installation and under construction
Allowance for impaired loss							
As at 1 January 2018	-	-	-	-	-	-	-
As at 30 September 2018	-	-	-	-	-	-	-
Increase during the year	13,729	-	-	-	-	-	13,729
As at 30 September 2019	13,729	-	-	-	-	-	13,729
Net book value							
As at 30 September 2018	211,837	744,089	2,134,130	75,761	12,782	317,633	146,581
As at 30 September 2019	231,840	755,536	1,807,522	66,108	10,716	374,344	177,092
Depreciation							
For the period from 1 January 2018 to 30 September 2018 (Baht 405 million included in manufacturing cost, and the balance in selling and administrative expenses)							469,352
For the year ended 30 September 2019 (Baht 513 million included in manufacturing cost, and the balance in selling and administrative expenses)							604,903

As at 30 September 2019, the Group had plant and machinery with net book values of Baht 61 million (2018: Baht 81 million) which were acquired under finance lease agreements.

As at 30 September 2019, certain items of plant and equipment were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation and allowance for impairment loss of those assets amounted to Baht 3,796 million (2018: Baht 2,841 million) (The Company only: Baht 1,064 million, 2018: Baht 494 million).

The Group had pledged their property, plant and equipment with net book values as at 30 September 2019 of approximately Baht 3,958 million (2018: Baht 4,277 million) (The Company only: Baht 399 million, 2018: Baht 434 million) as collateral against short-term and long-term credit facilities received from financial institutions.

18. Intangible assets

The net book value of intangible assets as at 30 September 2019 and 2018 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements				Separate financial statements			
	Computer software	Trademark	Right to use of electricity line	Computer software under installation	Total	Computer software	Trademark	Computer software under installation
As at 30 September 2019								
Cost	14,834	2,144	319,447	2,329	338,754	8,705	100	2,329
Less: Accumulated amortisation	(13,220)	(1,660)	(66,065)	-	(80,945)	(8,402)	(94)	-
Net book value	1,614	484	253,382	2,329	257,809	303	6	2,329
As at 30 September 2018								
Cost	14,295	2,144	319,447	-	335,886	8,479	100	-
Less: Accumulated amortisation	(12,580)	(1,446)	(50,114)	-	(64,140)	(8,095)	(84)	-
Net book value	1,715	698	269,333	-	271,746	384	16	-

A reconciliation of the net book value of intangible assets for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Net book value at beginning of period	271,746	284,193	400	550
Acquisition	2,868	90	2,555	240
Amortisation	(16,805)	(12,537)	(317)	(390)
Net book value at end of period	<u>257,809</u>	<u>271,746</u>	<u>2,638</u>	<u>400</u>

19. Bank overdrafts and Short-term loans from financial institutions

(Unit: Thousand Baht)

	Interest rate		Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018	2019	2018
	(% per annum) (% per annum)					
Bank overdrafts	MOR	MOR	5,914	87,011	2,171	86,898
Promissory notes and bill of exchange	1.80 - 1.95	1.92 - 2.20	<u>3,842,585</u>	<u>3,473,500</u>	<u>3,842,585</u>	<u>3,473,500</u>
Total			<u>3,848,499</u>	<u>3,560,511</u>	<u>3,844,756</u>	<u>3,560,398</u>

Bank overdrafts and short-term loans from financial institutions of the Company are secured by mortgages of property, plant and equipment of the Company as described in Note 17 to the financial statements.

Bank overdrafts and short-loans from financial institutions of the subsidiaries are secured by mortgages of property, plant and equipment of the subsidiaries as described in Note 17 to the financial statements and guaranteed by the Company.

20. Trade and other payables

As at 30 September 2019, the Group included the amount of Baht 225 million in its trade and other payables account (2018: Baht 162 million) (The Company only: Baht 171 million, 2018: Baht 129 million), which has been received from the Cane and Sugar Fund under the project to support sugar cane planters and sugar plants.

During the year ended 30 September 2019, the Group received a memo from the Office of the Cane and Sugar Fund regarding the write-off of the amount of Baht 162 million (The Company only: Baht 129 million), which the Group has been received under the project to support sugar cane planters and sugar plants for the 2017/2018 harvesting year. Therefore, the Group recorded it as “Revenue from the Cane and Sugar Fund under the project to support sugar cane planters and sugar plants” in the statement of comprehensive income.

21. Short-term loans from the Office of Cane and Sugar Fund

These short-term loans are loans that the Group has borrowed from the Office of Cane and Sugar Fund. The loans bear interest rate of 0.1% per annum. The principals and interests will be paid within December 2019.

22. Liabilities under finance lease agreements

The Company has entered into the finance lease agreements with a related company for rental of plant and machinery for use in its operation, whereby it is committed to pay rental on an annually basis. The terms of the agreements are 30 years. These agreements have effective interest rate at 11% per annum and the outstanding balance as follow:

(Unit: Thousand Baht)

	Consolidated/Separate financial statements	
	2019	2018
Liabilities under finance lease agreements	2,105,400	2,201,100
Less: Deferred interest expenses	(1,322,982)	(1,410,003)
Total	782,418	791,097
Less: Portion due within one year	(9,634)	(8,679)
Liabilities under finance lease agreements - net of current portion	772,784	782,418

Future minimum lease payments required under the finance lease agreements were as follows:

(Unit: Million Baht)

	As at 30 September 2019			
	Less than		Over 5	
	1 year	1-5 years	years	Total
Future minimum lease payments	96	383	1,626	2,105
Deferred interest expenses	(86)	(332)	(905)	(1,323)
Present value of future minimum lease payments	10	51	721	782

(Unit: Million Baht)

	As at 30 September 2018			
	Less than		Over 5	
	1 year	1-5 years	years	Total
Future minimum lease payments	96	383	1,722	2,201
Deferred interest expenses	(87)	(337)	(986)	(1,410)
Present value of future minimum lease payments	9	46	736	791

23. Long-term loans from financial institutions

(Unit: Thousand Baht)

Loan	Interest rate (% per annum)	Repayment schedule	Consolidated financial statements		Separate financial statements	
			2019	2018	2019	2018
1	4.20	Repayable in semi-annual installments, and the final installment is due in June 2022	1,947,947	2,496,520	1,947,947	2,496,520
2	3.92 - 3.95	Repayable in semi-annual installment, and the final installment is due in December 2019	149,521	449,522	-	-
Total			2,097,468	2,946,042	1,947,947	2,496,520
Less: Current portion			(748,446)	(848,573)	(598,925)	(548,573)
Long-term loans, net of current portion			1,349,022	2,097,469	1,349,022	1,947,947

The loans of the Company are secured by mortgages of property, plant and equipment of the Company as described in Note 17 to the financial statements. The loans of subsidiaries are guaranteed by the Company.

The loan agreements contain several covenants which, among other things, require to maintain debt-to-equity ratio and restrictions on mortgages of property, plant and equipment.

24. Long-term loans from the Office of Cane and Sugar Fund

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
Long-term loan	20,952	115,892	-	61,234
Less: Current portion	(12,541)	(94,940)	-	(61,234)
Long-term loans, net of current portion	<u>8,411</u>	<u>20,952</u>	<u>-</u>	<u>-</u>

These long-term loans are loans that the Group has borrowed from the Office of Cane and Sugar Fund. The loans bear average interest rates of 2.05% to 2.12% per annum. The principals and interests will be paid annually according to the factoring agreements between the Group and the Office of Cane and Sugar Fund, following the project financing for the purchase of harvesters. These loans are secured by authorised directors of the Group.

25. Provision for long-term employee benefits

The components of the provision for long-term employee benefits of the Group are as follows:

1. Defined benefit plan compensation under labour law.
2. Additional benefit plan grants to employees who were hired before 16 July 2012 and have more than 10 years of service, who are entitled to additional benefits upon retirement in accordance with stipulated conditions.
3. Additional benefit plan grants upon the death of employees entitled to additional death benefits in accordance with stipulated conditions.

Provision for long-term employee benefits for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 was as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Provision for long-term employee				
benefits at beginning of the period	342,862	333,162	209,727	205,185
Included in profit or loss:				
Current service cost	22,820	13,311	12,854	7,467
Interest cost	9,421	5,475	5,310	3,048
Past service cost	81,982	-	48,822	-
Actuarial loss arising from other				
long-term benefit	974	-	631	-
Included in other comprehensive income:				
Actuarial loss arising from				
Financial assumptions changes	42,076	-	22,445	-
Experience adjustments	2,126	2,235	1,101	2,119
Total	44,202	2,235	23,546	2,119
Benefits paid during the period	(20,820)	(11,321)	(12,281)	(8,092)
Provision for long-term employee				
benefits at end of the period	<u>481,441</u>	<u>342,862</u>	<u>288,609</u>	<u>209,727</u>

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Provision for defined benefit plans	474,021	336,604	284,516	206,249
Provision for other long-term employee				
benefits	7,420	6,258	4,093	3,478
Total	<u>481,441</u>	<u>342,862</u>	<u>288,609</u>	<u>209,727</u>

On 5 April 2019, The Labour Protection Act (No. 7) B.E. 2562 was announced in the Royal Gazette. This stipulates additional legal severance pay rates for employees who have worked for an uninterrupted period of twenty years or more, with such employees entitled to receive not less than 400 days' compensation at the latest wage rate. The law is effective from 5 May 2019. This change is considered a post-employment benefits plan amendment and the Group have additional long-term employee benefit liabilities of Baht 82 million (The Company only: Baht 49 million) as a result. The Group reflected the effect of the change by recognising past service costs as expenses in the statement of comprehensive income.

Long-term employee benefit expenses included in the profit or loss for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 consist of the following:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Cost of sales	47,718	8,971	25,181	4,728
Selling and administrative expenses	67,479	9,815	42,436	5,787
Total expenses recognised in profit or loss	115,197	18,786	67,617	10,515

The Group expects to pay Baht 94 million of long-term employee benefits during the next year (2018: Baht 69 million) (The Company only: Baht 76 million, 2018: Baht 55 million).

As at 30 September 2019, the weighted average duration of the liabilities for long-term employee benefit of the Group is 8 years (2018: 7 years) (The Company only: 8 years, 2018: 7 years).

Significant actuarial assumptions are summarised below.

(Unit: Percent per annum)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Discount rate	1.5%	2.8%	1.5%	2.8%
Salary increase rate	5.0%	5.0%	5.0%	5.0%

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 30 September 2019 and 2018 are summarised below.

(Unit: Million Baht)

	As at 30 September 2019			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(36)	39	(19)	21
Salary increase rate	53	(45)	29	(25)

(Unit: Million Baht)

	As at 30 September 2018			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(23)	25	(13)	14
Salary increase rate	33	(28)	18	(16)

26. Sugar cane price

For the 2018/2019 and 2017/2018 harvesting years, the Group purchased sugar cane in accordance with the letters of the Office of the Cane and Sugar Board that set the initial prices of sugar cane for each harvesting year. However, the Group's management expects the final sugar cane prices to differ from the initial prices, and recorded sugar cane prices and planter payables for the 2018/2019 and 2017/2018 harvesting years based on prices calculated with reference to the calculation method of the Office of the Cane and Sugar Board. Details of the initial cost and the cost calculated with reference to the calculation method of the Office of the Cane and Sugar Board are as follows:

The price calculated with reference to calculation method of the Office of the Cane and Sugar Board								(Unit: Baht per ton)
	The initial price of sugar cane		The Company		Subsidiary			
	Harvesting year	Harvesting year	Harvesting year	Harvesting year	Harvesting year	Harvesting year	Harvesting year	
	2018/2019	2017/2018	2018/2019	2017/2018	2018/2019	2017/2018	2017/2018	
For the year ended 30 September 2019								
Sugar cane price at a sweetness of 10 C.C.S.	700.00	-	656.21 - 683.77	-	679.05	-	-	
Increase or decrease in price for each 1 C.C.S. variation	42.00	-	39.37 - 41.03	-	40.74	-	-	
For the period form 1 January 2018 to 30 September 2018								
Sugar cane price at a sweetness of 10 C.C.S.	-	880.00	-	776.22 - 793.83	-	789.20	-	
Increase or decrease in price for each 1 C.C.S. variation	-	52.80	-	46.57 - 47.63	-	47.35	-	

27. Share-based payment - Warrants

The Company issued and offered grants of warrants to the executives and employees (ESOP) of the Group, which their terms 5 years from the issued date and no offered price. The staff who will be eligible to exercise right must be the staff during the exercise period. The staff holding the warrants but resign, be laid-off, be fired will no longer be eligible to exercise such right. In addition, the ineligible staff will have to return warrants to the Company immediately after termination. The warrants have exercise period at the period of 4 year and 6 months from the issued date. The exercise ratio and price on issued date are as follows:

	Issued date	Expired date	Exercise price (Baht/unit)	Number of issued warrants (unit)	Exercise ratio per 1 unit of warrant	Exercise period	
						Start	End
ESOP	1 December 2014	1 December 2019	10	28,000,000	1:1	1 June 2019	30 November 2019

The fair value of the warrant is measured by a Black-Scholes Model with the following financial assumptions:

Fair value of the warrant at grant date (Baht)	7.15
Grant date share price (Baht)	11.70
Warrant exercise price (Baht)	10.00
Expected volatility	125.03%
The expected period, that shareholders will completely use their right on warrant	4.5 years
Expected dividend yield	2.56%
Risk free interest rate	2.51%

The expenses for share-based payment transactions for the consolidated and separate financial statements, for the year ended 30 September 2019, were Baht 30 million and Baht 16 million, respectively, (for the period from 1 January 2018 to 30 September 2018: Baht 33 million and Baht 17 million for the consolidated and separate financial statements, respectively).

Movements of capital reserve for share-based payment transaction for year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 in the statement of financial position are as follows:

	(Unit: Thousand Baht)	
	Consolidated/Separate financial statements	
	2019	2018
Balance as at beginning of period	170,541	137,174
Recognised during the period	29,659	33,367
Balance as at end of period	200,200	170,541

Movements of the warrants for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 were as follow:

(Unit: Thousand Unit)

	Consolidated/Separate financial statements	
	2019	2018
Balance as at beginning of period	28,000	28,000
Exercised warrants during the period	-	-
Balance as at end of period	28,000	28,000

28. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside as a statutory reserve at least 5 percent of its net profit after deducting accumulated deficit brought forward (if any) until the reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution.

29. Expenses by nature

Significant expenses classified by nature for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Salaries and wages and other employee benefits	1,549,834	1,297,217	909,172	823,754
Depreciation and amortisation	1,270,365	964,820	605,220	469,742
Electricity and energy expenses	900,681	574,751	716,666	479,734
Transportation expenses	461,519	442,969	234,997	233,102
Repair and maintenance expenses	898,183	733,174	474,582	401,342
Stabilisation cost, research fees and cash paid to the Cane and Sugar Fund	1,154,006	1,065,476	1,003,708	898,152
Raw materials and consumables used	8,545,180	9,860,017	6,207,957	7,660,884
Changes in inventories of finished goods and work in progress	266,311	(1,024,375)	(308,752)	(648,333)

30. Income tax

Income tax expenses for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 are made up as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Current income tax:				
Current income tax charge	(127,677)	(123,995)	-	-
Adjustment in respect of income tax of previous year	-	1,609	-	-
Deferred tax:				
Relating to origination and reversal of temporary differences	8,720	(91,324)	15,044	(59,825)
Income tax benefits (expenses) reported in the statement of comprehensive income	<u>(118,957)</u>	<u>(213,710)</u>	<u>15,044</u>	<u>(59,825)</u>

The amounts of income tax relating to each component of other comprehensive income for the year ended 30 September 2019 and for period from 1 January 2018 to 30 September 2018 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Deferred tax on actuarial loss	(1,596)	(447)	(4,709)	(424)
	<u>(1,596)</u>	<u>(447)</u>	<u>(4,709)</u>	<u>(424)</u>

The reconciliation between accounting profit and income tax expense for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 is shown below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Accounting profit before tax	859,039	842,978	364,116	375,374
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	171,808	168,596	72,823	75,075
Adjustment in respect of income tax of previous year	2,252	(1,609)	-	-
Deferred tax assets which were not recognised during the period	174,628	238,952	84,889	174,860
Utilisation of previously unrecognised deferred tax assets - tax losses	(8,713)	(2,412)	-	-
Effects of:				
Promotional privileges	(199,611)	(189,080)	-	-
Income not subject to tax	-	-	(168,626)	(191,112)
Non-deductible expenses	5,342	20,266	2,545	7,197
Additional expense deduction allowed	(22,710)	(15,917)	(6,675)	(6,195)
Others	(4,039)	(5,086)	-	-
Total	(221,018)	(189,817)	(172,756)	(190,110)
Income tax expenses (benefits) reported in the statement of comprehensive income	118,957	213,710	(15,044)	59,825

As at 30 September 2019 and 2018, the components of deferred tax assets as stated in the statement of financial position are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Deferred tax assets				
Allowance for diminution in value of inventories	1,521	352	-	-
Allowance for impairment loss of investment properties	3,135	4,936	2,506	2,506
Finance leases	163,189	160,854	163,189	160,854
Provision for long-term employee benefits	58,285	55,387	42,595	30,855
Provision for decommissioning costs	6,256	6,033	-	-
Others	7,112	8,565	7,000	6,094
Total	239,498	236,127	215,290	200,309
Deferred tax liabilities				
Accumulated depreciation	(21,859)	(28,518)	(13,131)	(17,618)
Others	(410)	(696)	(411)	(696)
Total	(22,269)	(29,214)	(13,542)	(18,314)
Net	217,229	206,913	201,748	181,995

As at 30 September 2019, the Group has deductible temporary differences and unused tax losses totaling Baht 2,197 million (2018: Baht 1,716 million), for which deferred tax assets have not been recognised as future taxable profits may not be sufficient to allow the use of the temporary differences and unused tax losses as expenses in corporate income tax calculation within the prescribed period of time in the Revenue Code.

As at 30 September 2019, the unused tax losses of the Group, which were not recognised to deferred tax assets, will expire in 2030 (2018: expire in 2030).

31. Promotional privileges

The Group granted privileges by the Board of Investment are as follow:

Certificate No.	1095(1)/2555	2590(5)/2556	1557(1)/2558	59-1195-0-00-1-0	59-0348-0-13-2-0	59-0268-0-00-2-0	61-0899-0-00-2-0	60-0887-0-00-1-0
Promotional privileges for	Electricity generating from biomass	Production of biological fertilisers or organic fertilisers	Electricity generating and stream production from biomass	Packaging for foods (Biodegradable)	Electricity generating and stream production from biomass	Biogas	Biogas	Production of organic fertilisers
The significant privileges are	8 years	8 years	8 years	8 years	8 years	8 years	8 years	8 years
3.1 Exemption of corporate income tax for net income from promotional privileges and exemption of income tax on dividends paid from the profit of the operations throughout the period in which the corporate income tax is exempted	Received	Not received	Received	Not received	Received	Not received	Not received	Not received
3.2 A fifty percent reduction of the normal rate of corporate income tax on net income derived from the promoted operations for a period of five years after the expiration of the above corporate income tax exemption period.	7-Oct-13	Not yet Commence	7-Jul-16	31-Oct-16	26-May-17	Not yet Commence	Not yet Commence	Not yet Commence
4. Date of first earning operation income								

The Company has no revenues from promoted operations.

32. Earnings per share

Basic earnings per share is calculated by dividing profit for the period attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the period.

Diluted earnings per share is calculated by dividing profit for the period attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the period plus the weighted average number of ordinary shares which would need to be issued to convert all dilutive potential ordinary shares into ordinary shares. The calculation assumes that the conversion took place either at the beginning of the period or on the date the potential ordinary shares were issued.

The following tables set forth the computation of basic and diluted earnings per share for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018:

	Consolidated financial statements					
	Profit for the period		Weighted average number of ordinary shares		Earnings per share	
	2019	2018	2019	2018	2019	2018
	(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share	740,082	629,268	3,860,000	3,860,000	0.19	0.16
Effect of dilutive potential ordinary shares	-	-	-	-		
Diluted earnings per share	<u>740,082</u>	<u>629,268</u>	<u>3,860,000</u>	<u>3,860,000</u>	0.19	0.16

	Separate financial statements					
	Profit for the period		Weighted average number of ordinary shares		Earnings per share	
	2019	2018	2019	2018	2019	2018
	(Thousand Baht)	(Thousand Baht)	(Thousand shares)	(Thousand shares)	(Baht)	(Baht)
Basic earnings per share	379,160	315,549	3,860,000	3,860,000	0.10	0.08
Effect of dilutive potential ordinary shares	-	-	-	-		
Diluted earnings per share	<u>379,160</u>	<u>315,549</u>	<u>3,860,000</u>	<u>3,860,000</u>	0.10	0.08

For the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018, the assumed conversion of warrants did not occur because the market price of the Company's shares was lower than the exercise price of the warrants. Therefore, there is no impact on the diluted earnings per share.

33. Dividends

Dividends	Approved by	Total dividends (Million Baht)	Dividend per share (Baht)
Final dividends for 2017	Annual General Meeting of the shareholders on 23 April 2018	579	0.15
Total for 2018		579	0.15
Final dividends for 2018	Annual General Meeting of the shareholders on 25 January 2019	579	0.15
Total for 2019		579	0.15

34. Segment information

Operation 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 purposed, the Group is organised into business units based on their products and services as follows:

- (1) the production and distribution of sugar segment
- (2) the production and distribution of pulp segment
- (3) the production and distribution of alcohol segment and
- (4) the production and distribution of electricity segment

The chief operation 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 in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transaction.

For the year ended 30 September 2019, the Group has revenue from two major customers in amount of Baht 2,069 million and Baht 1,696 million (for the period from 1 January 2018 to 30 September 2018: Baht 1,655 million, Baht 1,594 million and Baht 1,509 million derived from three major customers).

Below is the consolidated financial information of the Group for the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018 by segment.

(Unit: Million Baht)														
	Production and distribution of sugar segment		Production and distribution of pulp segment		Production and distribution of alcohol segment		Production and distribution of electricity		Other segments		Elimination		Consolidation	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenue from sales and services														
- Local	5,246	6,236	304	213	1,631	1,323	2,016	1,657	155	92	(1,952)	(2,414)	7,400	7,107
- Overseas	7,708	9,176	1,023	1,022	-	-	-	-	-	-	-	-	8,731	10,198
Total	12,954	15,412	1,327	1,235	1,631	1,323	2,016	1,657	155	92	(1,952)	(2,414)	16,131	17,305
Segment profit	1,750	1,613	390	427	338	306	1,102	994	20	15	68	92	3,668	3,447
Unallocated income and expenses:														
Other income													348	147
Gain on exchange													85	50
Selling and administrative expenses													(2,933)	(2,539)
Share of loss of a joint venture													(6)	-
Finance expenses													(303)	(262)
Income tax expenses													(119)	(214)
Profit for the period													740	629

Transfer prices between business segments are as set out in Note 7 to the financial statement.

35. Provident fund

The Group and their employees have jointly established provident funds in accordance with the Provident Fund Act B.E. 2530. The Group and their employees, who are member of the funds, contribute to the fund monthly at the rates of 3 - 15 percent of basic salary. The funds, which are managed by licensed fund managers, will be paid to employees upon termination in accordance with the fund rules. The contribution during the year ended 30 September 2019 amounting to Baht 16 million (for the period from 1 January 2018 to 30 September 2018 amounting to Baht 14 million) (The Company only: Baht 10 million, for the period from 1 January 2018 to 30 September 2018 amounting to Baht 9 million) were recognised as expenses.

36. Commitments and contingent liabilities

36.1 Capital commitments

As at 30 September 2019 and 2018, the Group had capital commitments relating to the construction of factory buildings, and acquisition of machinery and equipment from the unrelated parties as follows:

(Unit: Million)

Currencies	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Baht	400	200	56	91
US dollar	21	-	-	-
JPY	120	-	-	-

36.2 Operating lease commitments

The Group had entered into several lease agreements in respect of land, office building space and equipment and service agreements. The terms of agreements are generally between 1 and 30 years.

As at 30 September 2019 and 2018, future minimum required under these operating lease are service agreements were as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Payable within:				
1 year	30	23	13	7
Over 1 and up to 5 years	15	3	8	2
More than 5 years	26	6	-	-

In addition, the Company has made the lease agreements for land with a related party. Lease term is for 30 years which the rate will be increased every 5 years based on the consumer price index but not over 20% of the former rate. The Company also has a right to renew agreement for another 30 years since the expired date of this agreement by advance inform 2 years earlier from the expired date. During the year ended 30 September 2019, the Company recognised rental expenses of Baht 5 million (for the period from 1 January 2018 to 30 September 2018: Baht 4 million).

36.3 Uncalled portion of investment

- a) As at 30 September 2019, the Company has commitment in respect of the uncalled portion of investment in subsidiary amounting to Baht 37 million (2018: Baht 37 million).
- b) As at 30 September 2019, KTIS Bioethanol Co., Ltd., a subsidiary, has commitment in respect of the uncalled portion of investment in joint venture amounting to Baht 64 million.

36.4 Bank guarantees

As at 30 September 2019 and 2018, there were outstanding bank guarantees issued by banks on behalf of the Group in respect of certain performance bonds as required in the normal course of business of the Group. The details of bank guarantees are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Guarantees for power sale agreements	3	3	-	-
Guarantees for sugar sale agreements	-	2	-	2
Guarantees electricity used	38	34	8	7
Total	41	39	8	9

36.5 Post-dated cheques

As at 30 September 2019 and 2018, the Group had post-dated cheques issued to planters for purchasing sugar cane as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Post-dated cheques	2,027	2,346	1,642	1,811

37. Financial instruments

37.1 Financial risk management

The Group's 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, planter receivables, loans, investments, trade and other payables, liabilities under finance lease agreements and short-term and long-term loans. The financial risks associated with these financial instruments and how they are managed is described below.

Credit risk

The Group is exposed to credit risk primarily with respect to trade and other receivables, planter receivables and loans. The Group manages the risk by adopting appropriate credit control policies and procedures. Therefore the Group does not expect to incur material financial losses. In addition, the Group does not have high concentrations of credit risk since it has a large customer base. The maximum exposure to credit risk is limited to the carrying amounts of trade and other receivables, planter receivables and loans as stated in the statement of financial position.

Interest rate risk

The Group's exposure to interest rate risk relates primarily to their cash at banks, loans, bank overdrafts, liabilities under finance lease agreements and interest bearing borrowing. Since most of the Group's financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the market rate.

As at 30 September 2019 and 2018, significant financial assets and liabilities classified by type of interest rate 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)

	30 September 2019						30 September 2018					
	Fixed interest rates			Non-interest bearing	Floating interest rate	Total	Fixed interest rates			Non-interest bearing	Floating interest rate	Total
	Within 1 year	1 - 5 years	Over 5 years				Within 1 year	1 - 5 years	Over 5 years			
Financial assets												
Cash and cash equivalents	-	-	-	9	286	295	-	-	-	14	287	301
Trade and other receivables	-	-	-	1,310	-	1,310	-	-	-	991	-	991
Planter receivables	-	-	-	391	-	391	-	-	-	575	-	575
Amounts due from the Office of the Cane and Sugar Fund	-	-	-	1,997	-	1,997	-	-	-	1,641	-	1,641
	-	-	-	3,707	286	3,993	-	-	-	3,221	287	3,508
Financial liabilities												
Bank overdrafts and short-term loans from financial institutions	3,842	-	-	-	6	3,848	3,474	-	-	-	87	3,561
Trade and other payables	-	-	-	1,672	-	1,672	-	-	-	1,378	-	1,378
Short-term loans from the Office of the Cane and Sugar Fund	1,171	-	-	-	-	1,171	268	-	-	-	-	268
Liabilities under finance lease agreements	10	51	721	-	-	782	9	46	736	-	-	791
Long-term loans from financial institutions	748	1,349	-	-	-	2,097	849	2,097	-	-	-	2,946
Long-term loans from related party	-	-	-	-	68	68	-	-	-	-	73	73
Long-term loans from the Office of the Cane and Sugar Fund	13	8	-	-	-	21	95	21	-	-	-	116
	5,784	1,408	721	1,672	74	9,659	4,695	2,164	736	1,378	160	9,133

As at 30 September 2019 and 2018, the Group had Interest Rate Swap contracts with banks as follows:

Consolidated financial statements			
As at 30 September 2019			
Notional amount (Million Baht)	Maturity	Interest rate to pay (% per annum)	Interest rate to receive (% per annum)
2,100	December 2019 - June 2020	3.9 - 4.2	The rates referenced 6M THBFIX plus a certain margin per annum
Separate financial statements			
As at 30 September 2019			
Notional amount (Million Baht)	Maturity	Interest rate to pay (% per annum)	Interest rate to receive (% per annum)
1,950	June 2020	4.2	The rates referenced 6M THBFIX plus a certain margin per annum
Consolidated financial statements			
As at 30 September 2018			
Notional amount (Million Baht)	Maturity	Interest rate to pay (% per annum)	Interest rate to receive (% per annum)
2,950	December 2018 - June 2020	3.9 - 4.2	The rates referenced 6M THBFIX plus a certain margin per annum
Separate financial statements			
As at 30 September 2018			
Notional amount (Million Baht)	Maturity	Interest rate to pay (% per annum)	Interest rate to receive (% per annum)
2,500	June 2020	4.2	The rates referenced 6M THBFIX plus a certain margin per annum

Foreign currency risk

The Group's exposure to foreign currency risk arises mainly from trading of goods and purchases of machinery denominated in foreign currencies. The Company and certain of its subsidiaries have entered into forward exchange contracts to manage the risk and the Company has entered into certain forward exchange contracts on behalf of the subsidiaries. Generally, these forward contracts mature within one year.

As at 30 September 2019 and 2018, the balances of financial assets and liabilities denominated in foreign currencies are summarised below.

As at 30 September 2019					
Foreign currency	Consolidated financial statements		Separate financial statements		Average exchange rate (Baht per 1 foreign currency unit)
	Financial assets (Million)	Financial liabilities (Million)	Financial assets (Million)	Financial liabilities (Million)	
US dollar	22.4	0.6	16.3	-	30.59
JPY	-	2.3	-	2.3	0.29

As at 30 September 2018					
Foreign currency	Consolidated financial statements		Separate financial statements		Average exchange rate (Baht per 1 foreign currency unit)
	Financial assets (Million)	Financial liabilities (Million)	Financial assets (Million)	Financial liabilities (Million)	
US dollar	4.0	2.0	1.0	0.3	32.41
JPY	-	5.0	-	3.0	0.29

As at 30 September 2019 and 2018, foreign exchange contracts outstanding are summarised below.

Consolidated financial statements						
As at 30 September 2019						
Foreign currency	Bought amount	Sold amount	Contractual exchange rate		Unrealised loss from change in fair value	
			Bought	Sold	Bought	Sold
	(Million)	(Million)	(Baht per 1 foreign currency unit)		(Million Baht)	(Million Baht)
US dollar	67.8	-	30.43 - 31.77	-	33.9	-
Euro	120.0	-	0.29	-	0.5	-

Separate financial statements						
As at 30 September 2019						
Foreign currency	Bought amount	Sold amount	Contractual exchange rate		Unrealised loss from change in fair value	
			Bought	Sold	Bought	Sold
	(Million)	(Million)	(Baht per 1 foreign currency unit)		(Million Baht)	(Million Baht)
US dollar	49.8	-	30.43 - 31.77	-	33.0	-

Consolidated/Separate financial statements						
As at 30 September 2018						
Foreign currency	Bought amount	Sold amount	Contractual exchange rate		Unrealised loss (gain) from change in fair value	
			Bought	Sold	Bought	Sold
	(Million)	(Million)	(Baht per 1 foreign currency unit)		(Million Baht)	(Million Baht)
US dollar	-	7.7	-	32.17 - 33.21	-	(1.7)
Euro	1.1	-	38.68	-	0.4	-

Cane and sugar prices fluctuation risk

The Company entered into sugar futures contracts to sell sugar in the futures market, under which delivery is due within the years 2020. However between the time that the Company entered into these future contracts and the time that the Company entered into actual sales agreements with customers, the world marker price of sugar due for delivery in 2019 continually fluctuated. As a result, for the year ended 30 September 2019 the Company had gain of approximately Baht 59 million, arising from closing positions under futures contracts for which delivery was due in 2019, which have been recognised in the comprehensive income statement.

As at 30 September 2019 Sugar futures contracts with no actual delivery, which have an open status, are summarised below.

(Unit: Million US dollar)

	Consolidated/Separate financial statements	
	Contractual value	Fair value
Futures sales contracts	5.6	5.7

Fair value of sugar futures contracts are based on Intercontinental Exchange contract No.11 in the New York market.

37.2 Fair values of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

The methods and assumptions used by the Group in estimating the fair value of financial instruments are as follows:

- a) For financial assets and liabilities which have short-term maturity, including cash and cash equivalents, accounts receivable and short-term loans, accounts payable and short-term borrowings, their carrying amounts in the statement of financial position approximate their fair value.
- b) For biological assets, their fair value has been determined based on discounted cash flows reference to fair value less costs to sell at the point of harvest. The valuation involves certain assumptions and estimates such as the final sugar cane prices, a sweetness and weight of sugar cane.
- c) For long-term loans carrying interest at rates close to market interest rates, their carrying amounts in the statement of financial position approximate their fair value.

As at 30 September 2019, the Group had the asset that were measured at fair value as described in Note 12 to the financial statements. The fair value includes in level 3.

As at 30 September 2019, the Group had the assets and liabilities that were disclosed as follows:

- The fair value includes in level 2 as present in Note 37.1 to the financial statements.
- The fair value includes in level 3 as present in Note 16 to the financial statements.

The fair value disclosure of derivatives 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, interest rate yield curves and commodity price yield curves. The Group had considered to counterparty credit risk when determining the fair value of derivatives.

During the year ended 30 September 2019 and for the period from 1 January 2018 to 30 September 2018, there were no transfers within the fair value hierarchy.

38. Capital management

The primary objective of the Company's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 30 September 2019, the Group's debt-to-equity ratio was 1.29:1 (2018: 1.24:1) and the Company's was 0.98:1 (2018: 0.88:1).

39. Events after the reporting period

39.1 On 9 October 2019, GGC KTIS Bioindustrial Co., Ltd., a joint venture that was originally held by KTIS Bio Ethanol Co., Ltd. (subsidiary of the Company), registered an increase in its share capital from Baht 700 million (7,000,000 ordinary shares at a par value of Baht 100 each) to Baht 2,600 million (26,000,000 ordinary shares at a par value of Baht 100 each), of which 25 percent was called up. KTIS Bio Ethanol Co., Ltd. paid for the increased shares at the same proportion of the original investment, totaling Baht 237.5 million.

39.2 At the Company's Board of Directors' meeting on 25 November 2019, it approved a dividend payment at Baht 0.15 per share for 3,860,000,010 ordinary shares, amounting to Baht 579 million. However, the approval for the dividend payment shall be proposed to the Annual Shareholders' Meeting for the year 2020 for further consideration and approval.

39.3 The Board of Directors' meeting of Thai Identity Sugar Co., Ltd., a subsidiary, held on 1 October 2019, approved the increase in the share capital from Baht 1,215 million (12,150,000 ordinary shares at a par value of Baht 100 each) to Baht 3,600 million (36,000,000 ordinary shares at a par value of Baht 100 each). In addition, the Company's Board of Directors' meeting on 25 November 2019, approved the additional investment in the proportion of the Company's shareholding, totaling Baht 2,385 million. However, the approval for the increase in the subsidiary's share capital shall be proposed to its Extraordinary General Meeting for further consideration and approval.

40. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 25 November 2019.



KTIS
More Than Sugar

บริษัท เกษตรไทย อินเตอร์เนชั่นแนล ซูการ์ คอร์ปอเรชั่น จำกัด (มหาชน)
Kaset Thai International Sugar Corporation Public Company Limited

24 อาคารเอกพล ถนนวิภาวดีรังสิต แขวงรัชดาภิเษก เขตดินแดง กรุงเทพมหานคร 10400

โทรศัพท์ 0-2692-0869-73 โทรสาร 0-2246-9125, 0-2246-9140

24 Aekaphol Bldg., Vibhavadi Rangsit Rd., Ratchadaphisek, Din Daeng,
Bangkok 10400, Thailand

Tel. [+66] 2692-0869-73 Fax [+66] 2246-9125, 2246-9140