

ANNUAL 2019







MESSAGE FROM CEO

Fiscal Year 2019 was a year of corporate reform for our company. On January 3, 2019, Thai Storage Battery Public Company Limited changed its corporate name to Hitachi Chemical Storage Battery (Thailand) Public Company Limited and made a fresh start.

Subsequently, the Company completed the entire business transfer of the two subsidiaries on April 1, 2019 and moved forward with business restructuring for the purpose of reducing costs and enhancing internal control for sustainable growth. Sales revenue was Baht 4,799 million, 4.38 percent decreased from the previous year mainly due to slowdown of Thai domestic market, but the operating results returned to a profit of Baht 137 million.

I, on behalf of the management of the Company, would like to express my appreciation to all shareholders, customers, suppliers, business partners, financial institutions, our employees and other stakeholders who give us confidence and trust. I wholeheartedly believe that our unity and cooperation would drive the Company forward to the prosperity and better performance in the future.

Mr. Toshinori Osumi

长路局才

Chief Executive Officer

SUMMARY OF FINANCIAL DATA

	2019	2018	2017	Gro	owth Rate	
Total Assets	3,054,749,429.00	3,120,439,008.00	3,446,630,983.00	(2.11)	(9.46)	(8.32)
Total Liabilities	1,465,730,317.00	1,653,733,716.00	1,874,846,622.00	(11.37)	(11.79)	6.93
Shareholder's Equity attributable to owners of parent	1,586,113,642.00	1,464,345,929.00	1,569,203,796.00	8.32	(6.68)	(19.88)
Sales Revenue	4,799,160,350.00	5,019,065,178.00	5,282,806,012.00	(4.38)	(4.99)	(0.54)
Total Revenue	4,928,624,136.00	5,125,606,185.00	5,325,234,497.00	(3.84)	(3.75)	(0.57)
Cost of Sales	3,811,272,710.00	4,100,595,943.00	4,495,114,794.00	(7.06)	(8.78)	11.76
Selling and Administrative expenses	910,936,326.00	1,132,862,360.00	1,177,356,296.00	(19.59)	(3.78)	6.37
Gross Profit	987,887,640.00	918,469,235.00	787,691,218.00	7.56	16.60	(38.91)
Net Profit	136,631,645.00	(104,857,867.00)	(348,726,881.00)	230.30	69.93	(322.81)
Paid-up Capital (Baht)	200,000,000.00	200,000,000.00	200,000,000.00			
Net Profit Margin (%)	2.77	(2.05)	(6.55)			
Return on Equity (%)	8.96	(6.91)	(19.77)			
Return on Assets (%)	4.43	(3.19)	(9.68)			
Earning Per Share (Baht)	6.83	(5.24)	(17.44)			
Book Value (Baht)	79.31	73.22	78.46			



POLICY AND BUSINESS OVERVIEW

Identity of the Hitachi Chemical Group

The "Hitachi Chemical Group Identity" is the globally shared structure of our philosophy and values, established to strengthen our group's teamwork beyond regions and business fields.

Mission

"Contribute to society through the development of superior technologies and products."

Values: Founding Spirit

"Pioneering Spirit"

To work creatively, using novel approaches to enter new areas. To always act as a pioneer within our areas of expertise and to have the passion to pursue higher goals beyond our capabilities.

"Sincerity"

To act with a sense of ownership and honesty at all times and never pass the buck.

The spirit to meet society's expectations and generate credibility for Hitachi.

"Harmony"

The willingness to respect the opinions of others and discuss matters in a manner that is thorough and frank, but fair and impartial, and once a conclusion has been reached, to cooperate and work together to achieve a common goal.

Vision

With a pioneering spirit to explore uncharted areas, we develop innovative solutions beyond the boundaries of chemistry, delivering "wonders" that exceed the expectations of customers and society.

The Company (formerly Thai Storage Battery PLC.) was founded in 1986 and became a public company limited in 1994 under the company registration certificate no. 0107537002141. The Company's main business objective is the manufacture and distribution of automotive and motorcycle batteries with domestic distributions under the "3K" brand and export distributions to over 50 countries on every continent worldwide under the "3K", "KV", "TSB" and "TIGER" brands.

The Company features the following six product groups:



- 1. Automotive Batteries
- 3. Lighting Batteries
- 5. Golf Cart Batteries

- 2. Motorcycle Batteries
- 4. Traction Batteries
- 6. EB Batteries

The Company's offices and factories are located at 387 Moo 4, Soi Patana 3, Sukhumvit Road, Bangpoo Industrial Estate, Praekasa, Muang District, Samutprakarn 10280, Tel. 0 - 2709 - 3535 (16 automatic lines), Home Page: www.hitachi-chem-bt.com. At present, the Company has 20,000,000 common shares of paid-up and issued registered capital valued at ten baht per share. The Company's average production capacity for all types of batteries is 350,000 batteries per month.

The Extraordinary General Meeting of Shareholders No. 1/2018, held on 1 November 2018 approved the restructuring of the Company business by transferring the entire business from Power Plas Co., Ltd. and 3K Products Co., Ltd., 99.99 % of shares of both of which are held by the Company, to the Company for the purpose of cost reduction and optimizing the efficiency of supervision and internal control. The Company acquired all the assets and liabilities, rights, duties and obligations of Power Plas Products Co., Ltd. and 3K Products Co., Ltd., on 1 April 2019.

The Extraordinary General Meeting of Shareholders No. 2/2018, held on 20 December 2018, approved the change of the name of the Company to "Hitachi Chemical Storage Battery (Thailand) Public Company Limited" instead of "Thai Storage Battery Public Company Limited" which was registered on 3 January 2019.

General Information

The subsidiary and affiliated companies which the Company holds their shares more than 10% are as follows:

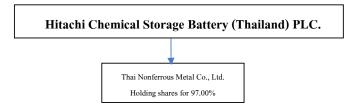


Figure 1. Structure of shareholdings



The Company has divided its operation in the Group as follows:

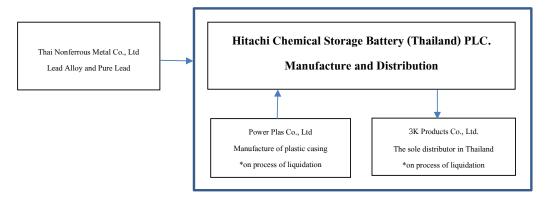


Figure 2. The Company's operation in the group

<u>Upstream Business</u>

The Company holds the total of 2,425,000 shares of Thai Nonferrous Metal Co., Ltd., which is equivalent to 97.00%. It is the factory of recycled lead smelting plant by using used batteries with paid excise tax as the raw materials of the production. The produced leads will be distributed to the Company in order to reduce the impacts of price fluctuation and shortage of raw materials from lead import.

<u>Downstream Business</u> is engaged by the Company.

The Company holds the total of 9,999,996 shares of Power Plas Co., Ltd., which is equivalent to 99.99%. It was the company for manufacturing and distributing plastic for batteries and providing OEM service or processing or molding all kinds of plastic product, but the Company acquired all of its business as of 1 April 2019.

Power Plas Co., Ltd. has already registered for the company dissolution on 19 April 2019 and it is currently on process of liquidation.

The Company holds the total of 79,994 shares of 3K Products Co., Ltd., which is equivalent to 99.99%. It was responsible for being a distributor and planning marketing strategies for the replacement-equipment market (REM) by distributing products through over 200 dealers of the company in all regions over the country and more than 3,000 stores, but the Company acquired all of its business as of 1 April 2019.

3K Products Co., Ltd., has already registered for the company dissolution on 19 April 2019 and it is currently on process of liquidation.

The Company held the total of 499,996 shares of 3K Traction Battery Co., Ltd., which was equivalent to 99.99%. It was responsible for manufacturing metal earing for battery for forklift, leasing, maintaining, and providing maintenance service for batteries, forklifts, including after-sales service to other companies.

3K Traction Battery Co., Ltd. has registered for the company dissolution on 30 November 2018 and completed liquidation procedure on 17 April 2019.

Subsidiaries

Thai Nonferrous Metal Company Limited

Company Name Thai Nonferrous Metal Company Limited

Factory 192, Moo 7, Hua Samrong Subdistrict,

Plaeng Yao District, Chachoengsao Province 24190

Telephone 0-3857-5368-9, 0-3857-5381-6

Facsimile 0-3857-5373

Registration As a limited company on 28 March 1997

Corporate Registration No. 0105540032437

Type of Business Lead Alloy and Pure Lead

Fiscal Year 1 January - 31 December

Auditor Ms. Vilailak Laohasrisakul Certified Public Accountant License No.6140

Ms. Visutta Jariyathanakorn Certified Public Accountant License No.3853

Ms. Manee Rattanabunkut Certified Public Accountant License No.5313

As of 31 December 2019

Registered Capital of Ordinary Shares 2,500,000 shares at the par value of 100 baht per share

Issued and Paid-up Capital 2,500,000 shares at the par value of 100 baht per share

Number of Shareholders 3 shareholders

Director Mr. Toshinori Osumi



Subsidiaries on process of liquidation

3K Products Company Limited

Company Name 3K Products Company Limited

Head Office 396 Sukhumvit Road, Soi 103 Bang Na, Bangkok 10260

Telephone 0-2393-3333

Facsimile 0-2749-4153

Registration As a limited company on 10 September 1987

company dissolution on 19 April 2019

Corporate Registration No. 0105530046044

Type of Business Distribution of batteries for automobiles, golf cars and general lighting

Distribution of Dividend According to the resolution of annual general meeting of shareholders

Fiscal Year 20 April 2020 – 19 April 2021

Auditor Mr. Pichai Piyapiwat Certified Public Accountant License No. 10450

As of 31 December 2019

Registered Capital of Ordinary Shares 80,000 shares at the par value of 100 baht per share

Issued and Paid-up Capital 80,000 shares at the par value of 100 baht per share

Number of Shareholders 3 shareholders

Liquidator as of 31 December 2019

1. Mr. Toshinori Osumi

Power Plas Company Limited

Company Name Power Plas Company Limited

Head Office 298 Moo 4, Soi 5, Sukhumvit Road, Praekasa, Muang District,

Samutprakarn 10280

Telephone 0-2709-4095

Facsimile 0-2709-4093

Registration As a limited company on 26 August 2010

company dissolution on 19 April 2019

Corporate Registration No. 0115553011239

Type of Business Manufacture and distribution of plastic casing for batteries



Distribution of Dividend According to annual general meetings of shareholders

Fiscal Year 20 April 2020 – 19 April 2021

Auditor Mr. Pichai Piyapiwat Certified Public Accountant License No. 10450

As of 31 December 2019

Registered Capital of Ordinary Shares 10,000,000 shares at the par value of 10 baht per share

Issued and Paid-up Capital 5,000,000 shares at the par value of 10 baht per share

5,000,000 shares at the par value of 3 baht per share

Number of Shareholders 3 shareholders

Liquidator as of 31 December 2019

1. Mr. Toshinori Osumi

Other reference persons

Share Registrar Thailand Securities Depository Co., Ltd.

62, The Stock Exchange of Thailand Building, 4th Floor,

6 - 7 Ratchadaphisek Road, Klong Toei, Bangkok 10110

Telephone 0 - 2229 - 2800

Auditor Ms. Vilailak Laohasrisakul Certified Public Accountant License No.6140

Ms. Visutta Jariyathanakorn Certified Public Accountant License No.3853

Ms.Manee Rattanabunkut Certified Public Accountant License No.5313

EY Office Company Limited

33rd Floor, Lake Ratchada Building

193 / 136-137 Ratchadaphisek

Khlong Toei, Bangkok 10110

Phone + 66-2264-9090

Fax + 66-2264-0789-90

Legal Advisor Bunchong and Vidhaya Law Office Co., Ltd

33/35, 33/39-40 Wall Street Tower Building, 9th Floor, Surawongse Road, Bang

Rak, Bangkok 10500

Telephone 0 - 2236 - 2334



THE AUDIT COMMITTEE REPORT

To The Shareholders of Hitachi Chemical Storage Battery (Thailand) Public Company Limited:

The Audit Committee (called hereinafter "the Committee") of Hitachi Chemical Storage Battery (Thailand) Public Company Limited (called hereinafter "the Company"), has been appointed by the Company's Board of Directors on February 20, 2018 with a 2-year term of office. The current term ends on April 30, 2020.

The Committee consists of 3 independent non-executive directors of the Company, one of which possesses appropriate professional accounting and financial background. The Company's internal auditor serves as secretary to the Committee.

The Committee performs its duties as prescribed in the Audit Committee Charter which was officially approved by the Board of Directors.

In 2019, the Committee held a total of 6 meetings. Certain members of the Company's high ranking management were invited to attend most the Committee meetings as the Committee deemed it necessary and appropriate. The external auditor attended all Committee meetings. One of the 6 meetings held was exclusively arranged only for the Committee members and the external auditor to discuss audit issues without the presence of the Company's executives.

The Committee chairman and the other two members of the Audit Committee fully attended all of those 6 meetings.

The Committee acknowledged the external auditor's observations derived from her reviews of quarterly financial reports as well as from the examination of financial statements for the year 2019. In this regard, the Committee also requested the external auditor to give importance to the presentation of her findings on weaknesses in the Company's internal control system and on any inefficiencies found during the course of the auditor's fieldworks with an aim to help reduce excessive costs. The Committee and the auditor extensively discussed and sought appropriate corrective measures to be recommended to the Company's management.

The Committee closely followed up on such request through discussions and enquiries with the external auditor at every Committee meeting. The Committee emphasized the importance of supporting both the external and internal auditors so that they could perform their respective professional duties with appropriate independence.



The Committee performs its duties which are stated in the Audit Committee Charter, the Committee gives priority to listening to comments from the Company's high-ranking executives as well as inviting explanations and comments from relevant staff at all levels.

For the year 2019, major activities undertaken by the Committee were classified into the following categories:

Preparation of Financial Statements

- 1. In considering results of interim reviews of the Company's quarterly financial reports and the result of annual examination of annual financial reports for the year 2019 as presented at the Committee meetings by the external auditor, the Committee normally seeks additional explanations from the auditor as well as clarifications from the responsible staff before listening to opinions from the Company's management. In this regard, where and when appropriate, the Committee provided its comments and recommendations on the issues discussed. The Committee's opinion is based on the Financial Reporting Standards which are applicable in Thailand. Those Standards extensively require adequate disclosure of financial information to stakeholders.
- 2. In reviewing the adequacy of disclosure of financial information in the Company's financial reports, the Committee took into consideration both verbal and written explanations made by the external auditor regarding related-party transactions between the Company, its subsidiaries and executives as to whether there was possible occurrence of material misconducts to ensure that the external auditor appropriately performed her duties in examining and investigating into this issue.

Internal Control and Internal Audit

The Committee reviewed internal audit system of the Company to ensure its effectiveness and that the internal auditor can perform her duties with sufficient independence. In this regard, the committee assigned the internal auditor to evaluate the effectiveness of the Company's internal control system and activities over various operations and required the internal auditor to report the evaluation results and the progress of internal audit work regularly at each and every Committee meeting.

Internal audit plan needs prior approval by the Committee before it can be implemented. During audit plan preparation stage the internal auditor was also told to prior consult with members of the management in order to collect information on their concerns which will be screened and responsively included in the internal audit plan. This practice makes the internal audit results be of greatest possible benefit to the Company. Also in supervising



internal audit activities the Committee responds to questions the internal auditor might have to help improve the overall internal audit quality and to ensure that the internal audit service truly enhances the Company's operational efficiency and effectiveness in as much as the available internal audit resources could provide.

The Committee reviewed and analyzed significant issues which were reported to the Committee relating to the Company's internal control, weaknesses and rooms for improvement and, where necessary, the Committee recommends additional corrective measures to both the management and the Board of Directors for their acknowledgement and consideration.

The Committee encourages both the company's internal and external auditors to work under their close cooperation especially in sharing and exchanging of information. This, in the Committee's opinion, would mutually enhance the overall quality of the two audit works.

Related-Party Transactions

The Committee reviewed as to any related-party transaction did occur during the year. Such transaction if occurred may pose significant conflicts of interest. Objectives of the review has been to evaluate whether related-party transactions did, in fact, happen and if they did have they been treated in a normal business manner as other business transactions regarding issues like the recording into the Company's books of account, presentation in the financial reports, and disclosures of such related-party transactions in compliance with the applicable Thai Financial Reporting Standards. The Committee reviewed each related-party transaction found by the auditor through discussion with the external auditor and made detailed inquiries into the matter. In case where there was need, the Committee requested additional explanation from the management and other responsible staff to fulfill its satisfaction.

The joint review by the auditor and the committee did not suggest any existence of significant related-party transaction that was not properly treated nor might pose possible problem of conflicts of interest.

Selection of External Auditor

The Committee selected and proposed the following alternate persons to be appointed as the Company's external auditor for 2020, namely Miss Vilailak Laohasrisakul (CPA(Thailand) Registration No.6140) or Miss Visuta Jariyathanakorn (CPA(Thailand) Registration No.3853) or Miss Manee Rattanabunkut (CPA (Thailand) Registration No.5313), all from the EY Company Limited. These persons are independent professionals with



sufficient knowledge and skill to perform as the Company's external auditor. The proposed professional audit fee was also reasonable given the scope of audit responsibilities. The Committee resolved and proposed to the Board of Directors for the Board's agreement, upon such Board's agreement the proposal is to be brought forward to the consideration of the shareholders at the Annual General Meeting of Shareholders for final approval of the appointment of the Company's external auditor for the fiscal year 2020. In addition, the recommended professional fee for the audit of the Company's 2020 financial reports be set at no more than 2,350,000 baht (Two million three hundred and fifty thousand Thai baht).

Compliance with Applicable Laws and Regulations

The Committee reviewed as to whether the Company operates in compliance with the Public Company Law, the Regulations of the Stock Exchange of Thailand and the Securities and Exchange Commission as well as other applicable laws and regulations relating to the industry in which the Company operates.

IN SUMMARY

Both the management and the Board of Directors of the Company firmly adhere to good corporate governance policy.

As a result, internal control system has been put in place reasonably effective and can help prevent significant error or mistake from happening and in the case it does occur, a timely corrective actions can be taken.

The Company's external auditor appointed by the shareholders can perform her duties with adequate independence.

Company's internal auditor reports to the chief executive officer not to the Committee, but does have adequate independence of the BU managers being audited. However the position of chief internal executive is still vacant and also a few number of internal audit staff positions have not yet been filled. The Committee's opinion is that current number of internal audit staff cannot cope with the workload and that the vacant chief internal executive and internal audit staff should be recruited to fully fill the vacancies so that the Company's internal audit function can truly operate to cover wider scope of work and to serve more effectively as one of the very useful management tools.

All related-party transactions occurred during the year were executed as usual business transactions and they were properly treated. Normal benefits to the Company was derived from such transactions.



The Committee worked closely with the Company's external auditor and to the best of the Committee's knowledge, there is no material abnormal transaction.

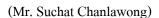
The Company complied fully and correctly with the applicable laws and regulations.

The external auditor reported that the Company's separate and consolidated financial statements for the fiscal year ending December 31, 2019 were prepared in accordance with Thai Financial Reporting Standards and present fairly the financial positions of the Company and the results of its operations. Significant financial information has been adequately disclosed and there was no undisclosed matters or transactions that might significantly affect the audited financial statements.



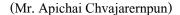
(Mr. Nontaphon Nimsomboon)

Chairman of the Audit Committee



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Member of the Audit Committee



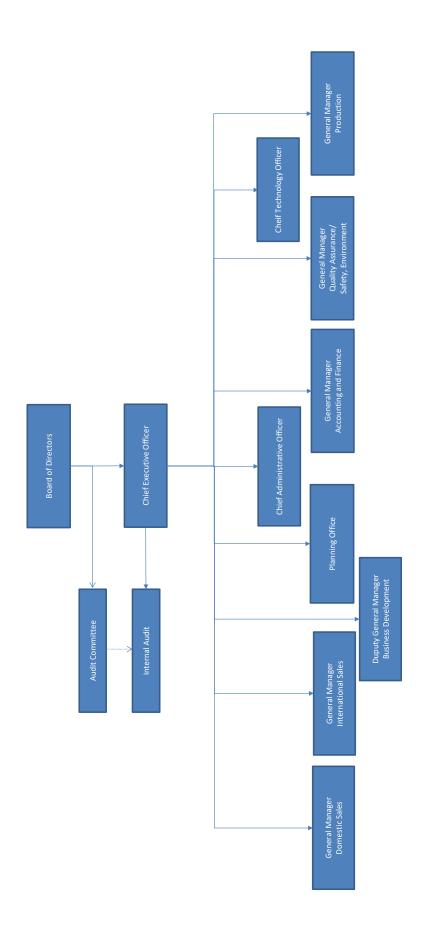
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Member of the Audit Committee

February 21, 2020



ORGANIZATION CHART





BOARD OF DIRECTORS

Mr. Yoshito Ishii

Position Chairman of Board of Directors

Age 51 Working Years 1

Education

• Graduate School of Engineering, Nihon University, Japan

Current position in the Company

2019 – Present Chairman of Board of Directors, Hitachi Chemical Storage Battery (Thailand)
 PLC.

Working Experience

• 2019 – Present	Executive Officer and Deputy General Manager of Energy Storage Business				
	Headquarters, Hitachi Chemical Co., Ltd.				
2017 – 2019	President, Hitachi Power Solutions Co., Ltd.				
• 2016 – 2017	General Manager of Energy Storage and Tribology Materials Business Unit,				
	Hitachi Chemical Co., Ltd.				
• 2013 – 2016	General Manager of Inorganic Materials R&D Dept., Hitachi Chemical Co.,				
	Ltd.				
1992 – 2013	Joined Hitachi Chemical Co., Ltd.				



Mr. Toshinori Osumi

Position Vice Chairman of Board of Directors and Chief Executive Officer

Age 61 Working Years 3

Education

- Faculty of Business Administration, Kwansei Gakuin University, Japan
- Advanced Management Program of The Wharton School, University of Pennsylvania, USA

Current position in the Company

2017 – Present Vice Chairman of Board of Directors and Chief Executive Officer, Hitachi
 Chemical Storage Battery (Thailand) PLC.

Working Experience

2015 – 2017 Executive Vice President, Hitachi Chemical Asia (Thailand) Co., Ltd.
 2010 – 2015 Managing Director, Hitachi Chemical (Thailand) Co., Ltd.
 1990 Joined Hitachi Chemical Co., Ltd.
 1981 – 1990 Joined Nippon Chemical Trading Co., Ltd.



Mr. Hiroaki Yamaguchi

Position Director

Age 52 Working Years 3

Education

• Graduate School of Engineering, Nagoya Institute of Technology, Japan.

Current position in the Company

• 2017 - Present Director, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

- 2017 Present General Manager of Automotive Battery Business Sector, Energy Storage Business Headquarters, Hitachi Chemical Co., Ltd.
- 2016 Transferred to Hitachi Chemical Co., Ltd. by way of mMerger
- 2015 2016 General Manager of Saitama Works, Shin-Kobe Electric Machinery Co., Ltd.
- 1992 2015 Joined Shin-Kobe Electric Machinery Co., Ltd.



Mr. Naoto Okada

Position Director

Age 59 Working Years 3

Education

Musashi Institute of Technology, Tokyo City University, Japan

Current position in the Company

• 2017 – Present Director, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

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•	2017 – Present	President, F	1ıtachı Cher	nical Asia	(Thailand)	Co., Ltd.

- 2015 2017 General Manager, Global Production Operational Headquarters, Hitachi Chemical Co.,
 Ltd.
- 2013 2015 Manager, Production Process Innovation Center, Production Operational Headquarters, Hitachi Chemical Co., Ltd.
- 2011 2013 Chief Engineer, Production Technology Dept. and Advanced Fundamental Technology Development Group, Production Technology Center, Manufacturing Management Sector, Hitachi Chemical Co., Ltd.
- 2010 2011 Deputy Managing Director, Hitachi Chemical (Singapore) Pte., Ltd.
- 2008 2010 General Manager of Ishioka Works, Hitachi AIC Inc.
- 1983 Joined Hitachi Chemical Co., Ltd.

% of Share : None
Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Masamichi Saito

Position Director

Age 57 Working Years 1

Education

- Bachelor of Laws, Sophia University, Japan
- Master of Laws (LL.M.), University of California, Davis, USA

Current position in the Company

- 2019 Present Director and Chief Administrative Officer, Hitachi Chemical Storage Battery (Thailand) PLC.
- 2018 Chief Legal Officer, Thai Storage Battery PLC.

Working Experience

•	2018	Rejoined Hitachi Chemical Co., Ltd., Manager, Legal Group
•	2017 - 2018	Joined Adastria Co., Ltd., General Manager, General Affairs and Legal Department
•	1985 - 2017	Hitachi Chemical Co., Ltd., Senior Manager, Group Management Promotion Group
		General Manager, Legal Group



Mr. Takahiro Tomiyama

Position Director

Age 48 Working Years 1

Education

Department of Electrical Engineering, National Institute of Technology, Nara College, Japan

Current position in the Company

- 2019 Present Director and Chief Technology Officer, Hitachi Chemical Storage Battery (Thailand) PLC.
- 2017 2018 General Manager-Technical integration, Thai Storage Battery PLC.

Working Experience

- 2016 2017 Senior Engineer, Core Technology Center, Battery Technology Group, Production Innovation Headquarters, Production Integration Division, Hitachi Chemical Co., Ltd.
- 2016 Transferred to Hitachi Chemical Co., Ltd. by way of merger
- 1993 2016 Joined Shin-Kobe Electric Machinery Co., Ltd.

% of Share : None

Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Nontaphon Nimsomboon

Position Independent Director and Chairman of the Audit Committee

Age 76 With the Company: 22 Years

Education

- B.A in Accountancy, B.Com.(Hons.), Thammasat University
- M.B.A. University of Iowa, USA. (Under Royal Thai Government Scholarship)
- Doctorate Degree in Accountancy (Honorary), Thammasat University
- National Defense College Degree, Class 35

Other qualifications

- C.P.A (Thailand)
- Fellow of The Canadian Comprehensive Auditing Foundation
- Outstanding Award: Royal Thai Government Scholar
- Director Capacity Building Programs with IOD

Director Accreditation Program (DAP) Class 4/2003

Director Certification Program (DCP), Class 89/2007

Monitoring Fraud Risk Management (MFM) Class 1/2009

Monitoring the System of Internal Control and Risk Management (MIR), Class 8/2010

Monitoring the Internal Audit Function (MIA), Class 7/2010

Monitoring the Quality of Financial Reporting (MFR), Class 11/2010

Current position in the Company

• 1998 – Present Independent Director, Audit Committee Chairman, Hitachi Chemical Storage Battery (Thailand) PLC.

Other Current Positions:

- 2005 Present Chairman, AMC International Consulting Co. Ltd.
- 2006 Present Member of the Executive Board, Thai Government Scholarship Association
- 2006 Present Lecturer, Faculty of Commerce & Accountancy, Thammasat University
- 2008 Present Members of the University Council and Audit Committee Chairman, Walailak University
- 2008 Present Member of the Audit Committee, Mae Fah Luang University
- 2016– Present Member of Executive Board, Than Tao Mahaprom, Erawan Hotel



•	2017– Present	Members of the University Council and Audit Committee Chairman, Thaksin
		University
•	2017– Present	Advisor, Faculty of Commerce & Accountancy, Thammasat University
Worki	ng Experience:	
•	2005 - 2014	Member of The Court of Directors and Audit Committee Chairman, The Bank of
		Thailand
•	2006 - 2014	Member of the Audit Committee Members, Commission, Securities and Exchange
		Commission of Thailand
•	1999 – 2013	Independent Director, CG Committee Chairman, Big C Supper Center PLC.
•	2005 – 2017	Member of the Audit Committee, Suranaree University of Technology
•	2006 – 2008	Independent Director and Audit Committee Chairman, Airports of Thailand PLC.
•	2002 - 2005	Director, Vice Executive Chairman, Saha-Union PLC.
•	1997 – 2001	Auditor General, Office of the Auditor General of Thailand
•	1997 – 2001	President, The Institute of Certified Accountants and Auditors of Thailand
•	1997 – 2001	President of Triam Udom Suksa Alumni Association under Royal Patronage

% of Share	: None
Director of others listed company	: No
Position in competitive companies/ connected businesses that may cause conflict of interest	: None
No criminal record of offence in the 10 preceding years	: None
Family relationship between executives:	: None





Mr. Apichai Chvajarernpun

Position Independent Director and Audit Committee

Age 70 Working Years 11

Education

- Bachelor of Engineering (Industrial Chemical), Chulalongkorn University
- Master of Engineering (Nuclear Technology), Chulalongkorn University

Other qualifications

- Graduate Diploma in Mini MBA Class 5, University of the Thai Chamber of Commerce
- Graduate Diploma in Senior Executive Class 26, Office of The Civil Service Commission
- Graduate Diploma in Information Technology Management, Office of The Civil Service Commission
- Certified of National Defense College Class 13
- Graduate Diploma in Government in democratic for Senior Executive Class 9, King Prajadhipok's Institute
- Graduate Diploma in Directors Certification Program (DCP) Class 91/2007 (IOD)

Current position in the Company

• 2009 - Present Independent Director, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

• 2010 – 2017	Director, Thai Nonferrous Metal Co., Ltd.
2009 – 2017	Director 3K Products Co., Ltd.
2008 – 2009	Deputy Permanent, Ministry of Natural Resources and Environment
2006 – 2008	Director General, Department of Mineral Resources
2003 – 2006	Director General, Pollution Control Department

% of Share : None
Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Suchat Chanlawong

Position Independent Director and Audit Committee

Age 73 Working Years 23

Education

- Bachelor of Civil Engineering, Kasetsart University
- Master of Science in Civil Engineer, University of Missouri, USA.
- Director Accreditation Program. Class 19/2004, (IOD)

Current position in the Company

• 1997 – Present Independent Director and Audit Committee, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

•	1997 - 2017	Director, 3K Products Co., Ltd.
•	1997 – 2017	Director, Thai Nonferrous Metal Co., Ltd.
•	2004 - 2008	Inspector General, Ministry of Energy
•	2003 - 2004	Deputy Director General Department of Mineral Fuels
•	2001 - 2003	Deputy Director General Department of Industrial Works
		Deputy Director General Department of Mineral Resources



MANAGEMENT TEAM

MANAGEMENT TEAM

Mr. Toshinori Osumi

Position Vice Chairman of Board of Directors and Chief Executive Officer

Age 61 Working Years 3

Education

- Faculty of Business Administration, Kwansei Gakuin University, Japan
- Advanced Management Program of The Wharton School, University of Pennsylvania, USA

Current position in the Company

2017 – Present Vice Chairman of Board of Directors and Chief Executive Officer, Hitachi
 Chemical Storage Battery (Thailand) PLC.

Working Experience

•	2015 - 2017	Executive Vice President, Hitachi Chemical Asia (Thailand) Co., Ltd.

• 2010 – 2015 Managing Director, Hitachi Chemical (Thailand) Co., Ltd.

1990 Joined Hitachi Chemical Co., Ltd.

• 1981 – 1990 Joined Nippon Chemical Trading Co., Ltd.

% of Share : None

Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Masamichi Saito

Position Director and Chief Administrative Officer

Age 57 Working Years 2

Education

- Bachelor of Laws, Sophia University, Japan
- Master of Laws (LL.M.), University of California, Davis, USA

Current position in the Company

- 2019 Present Director and Chief Administrative Officer, Hitachi Chemical Storage Battery (Thailand) PLC.
- 2018 Chief Legal Officer, Thai Storage Battery PLC.

Working Experience

2018 Rejoined Hitachi Chemical Co., Ltd., Manager, Legal Group
 2017 – 2018 Joined Adastria Co., Ltd., General Manager, General Affairs and Legal Department
 1985 – 2017 Hitachi Chemical Co., Ltd., Senior Manager, Group Management Promotion Group General Manager, Legal Group



Mr. Takahiro Tomiyama

Position Director and Chief Technology Officer

Age 48 **Working Years** 3

Education

Department of Electrical Engineering, National Institute of Technology, Nara College, Japan

Current position in the Company

- 2019 Present Director and Chief Technology Officer, Hitachi Chemical Storage Battery (Thailand) PLC.
- 2017 2018 General Manager-Technical integration, Thai Storage Battery PLC.

Working Experience

- 2016 2017 Senior Engineer, Core Technology Center, Battery Technology Group, Production Innovation Headquarters, Production Integration Division, Hitachi Chemical Co., Ltd.
 2016 Transferred to Hitachi Chemical Co., Ltd. by way of merger
- 1993 2016 Joined Shin-Kobe Electric Machinery Co., Ltd.

% of Share : None

Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Chakkapan Sangkaew

Position General Manager-Production

Age 47 Years Working Years 25

Education

- Bachelor of Science in Electrical Engineering, Kasem Bundit University
- Master of Business Administration Courses (MBA), Bangkok University

Current position in the Company

• 2014 – Present General Manager- Production, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

•	2009 - 2014	Manufacturing Factory Manager, Thai Storage Battery PLC.
•	2008 - 2008	Assistant Production Factory Manager, Thai Storage Battery PLC.
•	2007 - 2007	Senior Formation Production Manager, Thai Storage Battery PLC.
•	2000 - 2006	Battery Plate Production Manager, Thai Storage Battery PLC.
•	1998 – 1999	Assistant Battery Plate Production Manager, Thai Storage Battery PLC



Mr. Chayaphol Asavavallop

Position General Manager-Quality Assurance/ Safety and Environment

Age 51 Working Years 9

Education

• Bachelor of Science in Mechanical Engineer, Boston University, USA.

Current position in the Company

 2015 – Present General Manager-Quality Assurance/ Safety and Environment, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

•	2011 - 2015	Assistant Factory Manager of Dry Charge Battery Assembly, Thai Storage Battery PLC.
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	2006 - 2	2011	Factory	Manager o	of Thai	Dai-ichi	Co	Ltd
_	2000 - 2	2011	raciory	manager (n mai	Dai Kili	CU.,	Liu.

1997 - 2002	Engineer Manager of Sony Mobile Electronics Thailand Co., Ltd.

• 1995 – 1997 Quality Assurance Manager of Mitsui Siam Components Co., Ltd.

• 1991 – 1994 Supervisor of Product development of Bridgestone Japan Co., Ltd.

% of Share : None
Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Suwittawat Kaewwichian

Position General Manager-International Sales

Age 51 Working Years 18

Education

- Bachelor of Science, Khonkaen University
- Master of Business Administration, Ramkhamhaeng University

Current position in the Company

2015 – Present General Manager-International Sales, Hitachi Chemical Storage Battery (Thailand)
 PLC.

Working Experience

•	2010 - 2015	Business Development Division Senior Manager, Thai Storage Battery PLC.
•	2009 – 2009	Business Development Manager, Thai Storage Battery PLC.
•	2008 - 2008	Domestic Sales Manager (SLI), Thai Storage Battery PLC.
•	2006 – 2007	Assistant Manager of Domestic Sales Department, Thai Storage Battery PLC.
•	2001 - 2005	Chief of Domestic Sales Department, Thai Storage Battery PLC.

% of Share : None

Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



Mr. Somkiat Supreechachai

Position General Manager-Domestic Sales

Age 52 Working Years 6

Education

• Bachelor of Business Administration, Siam University

Current position in the Company

• 2020– Present	General Manager-New Brand Development, Hitachi Chemical Storage Battery	
	(Thailand) PLC.	
• 2019 – 2020	General Manager-Domestic Sales, Hitachi Chemical Storage Battery (Thailand) PLC.	
• 2019	Transferred to Hitachi Chemical Storage Battery (Thailand) PLC. by way of entire	
	business transfer	
2014 – 2019	Sales Director, 3K Products Co., Ltd.	

Working Experience

• 2011 – 2012	National Sales Manager, Bacardi (Thailand) Ltd.
2002 – 2009	Sales Manager, San Miguel (Thailand) Co., Ltd.
• 1990 – 2001	Assistant Sales Manager, Nestle (Thai) Ltd.



Mr. Wirachai Bunchuchuen

Position General Manager-Accounting and Finance

Age 50 Years, Working Years19

Education

- B.Acc: Faculty of Economices and Business Administration, Kasetsart University
- Master of Accoutancy, Faculty of Management and Tourism, Burapha University

Current position in the Company

• 2015 – Present General Manager-Accounting and Finance, Hitachi Chemical Storage Battery (Thailand) PLC.

Working Experience

- 2006 2015 Senior Accounting Manager, Thai Storage Battery PLC.
- 2003 2005 Accounting Manager, Thai Storage Battery PLC.
- 2000 2002 Assistant Accounting Manager, Thai Storage Battery PLC.

% of Share : None

Director of others listed company : No

Position in competitive companies/ connected businesses that may cause conflict of interest : None

No criminal record of offence in the 10 preceding years : None



HISTORY AND BACKGROUND

Hitachi Chemical Storage Battery (Thailand) Public Company Limited was established on 10 June 1986 with an initial registered capital investment of 8 million baht for the manufacturing and distribution of automotive and motorcycle batteries under the "3K" trademark.

On 10 June 1994, the Company registered its transformation to a public company after receiving approval from the Stock Exchange of Thailand. The company's shares were first traded on 10 February 1995.

As of 31 December 2018, the Company has registered capital of 200 million baht and 1,467million baht equity shares, worth 5,019 million baht, the proportion of domestic sales and exports at a rate of 58:42.

On January 3, 2019, the Company changed the company to "Hitachi Chemical Company Storage Battery (Thailand) Public Company Limited." With the extraordinary general meeting of shareholders No. 2/2018 of Thai Storage Battery Public Company Limited on 20 December 2018, it was resolved to approve such change of the company name and company seal as well as the amendment of the Memorandum of Association and Articles of Association. It was announced to the Stock Exchange of Thailand.

The Company's batteries production, research & development have been accredited by the following international standards.

- 1. Thai Industrial Standards and received TISI 6 1981 logo on 15 May 1989
- 2. ISO 14001:2015 Environmental Management certification received on May 24,2016
- 3. ISO9001:2015 NAC Quality Management certification received on November 26, 2017
- 4. IATF16949:2016 Quality Management certification received on November 26, 2017
- 5. Green industry level3 certification received on July 18, 2019
- 6. JIS-Japanese Industrial Standard
- 7. DIN Detaches Institute Fur Norm
- 8. SAE Society of Automotive Engineers
- 9. International Electro Technical Commission (IEC)
- 10. SNI Indonesia certification received on December 26, 2019
- 11. ESMA of UAE certification received on October 14, 2019

The Company's products can be classified into six categories as following:

- 1. Conventional Type Battery: is an alloy battery which uses lead, antimony for grid structure. As a result of using Antimony, the battery has high rate of water loss during usage. Hence, users need to fill the battery with distilled water regularly.
- 2. Maintenance Free Battery (MF): is an alloy battery which uses lead, calcium and tin for grid structure.

 As a result of using calcium and tin components, the battery has low water loss rate. This allows users



to use the battery conveniently as they do not need to fill in distilled water during usage (under specified working conditions). In addition, the battery also has Polyethylene (PE) separator which increases power when start the engine.

- 3. Sealed Maintenance Free Battery (SMF): is an alloy battery which uses lead, calcium and tin for grid structure. As a result of using calcium and tin components, the battery has low water loss rate. This allows users to use the battery conveniently as they do not need to fill in distilled water during usage (under specified working conditions). In addition, the battery also has Polyethylene (PE) separator which increases power when start the engine. As further advanced loss water structure, the vaporized water from battery can be returned to battery.
- 4. Valve Regulated Lead Acid Battery (VRLA): is an alloy battery which uses lead, calcium and tin for grid structure. As a result, using calcium and tin components, the battery has low rate of water loss. The battery also has Absorptive Glass Mat (AGM) separator which prevents acid from spilling outside. The battery is designed to have secured pressure plates which increase the battery's lifetime and usage hour.
- 5. Traction Battery: is an alloy battery which uses lead, high antimony for grid structure. Also, it uses the spine grid and the tubular, structure of the positive plates for getting high power and long durability. Traction battery is mainly for electric forklift application and it can prevent air pollution by exhaust gas from the engine. It can contribute for reducing CO₂ gas emission.
- 6. Deep Cycle Battery is an alloy battery which uses lead, high antimony for grid structure
 - a. Golf: battery for golf cart.
 - b. EB: battery for Solar cells and industrial construction cars.
 - c. Lighting: battery for lighting

Product Types

The Company's batteries are suitable for all types of vehicles manufactured under European, Japanese and USA standard and different weather conditions whether in cold or hot climate. The Company's products can be classified into the following six groups:

- 1. Automotive Batteries
 - 1.1 Low Maintenance Batteries
 - 1.2 Maintenance-Free Batteries
 - 1.3 EFB battery (Based on Japanese standard: ISS)
- 2. Motorcycle Batteries
 - 2.1 Low Maintenance Batteries



2.2 Valve-Regulated Lead-Acid Batteries (VRLA)

- 3. Lighting Batteries
- 4. Traction Batteries
- 5. Golf Cart Batteries Based on Deep cycle type
- 6. EB Battery Based on Deep cycle

Overview of the Company's Business Operations

The Company is one of the largest battery manufacturers in Thailand and possesses its own production technology. Battery production in Thailand is mainly used for batteries for automotive and motorcycle. We made MF, SMF and other type also in Thailand.

In order to reduce imports and expand domestic market, the Company has pioneered and developed other types of batteries including batteries for electric forklift (Traction Battery), batteries for golf cart and batteries for solar cells power panel (Deep Cycle Battery).

Industrial Conditions and Domestic Competition

Status of Manufacturers

There are eight major manufacturers in the Thai battery manufacturing industry:

Manufacturers	Brand
Hitachi Chemical Storage Battery (Thailand) Public Company Limited	3K
Siam GS Battery Company Limited	GS
Furukawa Battery Company Limited	FB
Yuasa Battery Public Company Limited, Thailand	YUASA
Panasonic Battery Company Limited, Thailand	PANASONIC
Siam Battery Industry Company Limited	BOLIDEN
Thai Petrochemical Company Limited	TPS
Hitachi Chemical Asia (Thailand) Company Limited	HITACHI

Most of battery manufacturers in Thailand are joint ventures between Thai and foreign companies, especially from Japan. These companies use technology that has been transferred from parent companies in Japan. Hitachi Chemical Storage Battery (Thailand) Public Company Limited possesses its own advanced production technology that is competitive in the battery manufacturing industry. Although the production technology has been developed for sometimes, lead still remains as main raw material for battery because of its competitive price when compare to other materials such as lithium.



Year	Passenger Car	Commercial Vehicles	Total	Growth Rate
2009	313,442	685,936	999,378	-28.30%
2010	554,387	1,090,917	1,645,304	64.63%
2011	537,987	919,808	1,457,795	-11.40%
2012	957,622	1,496,095	2,453,717	68.32%
2013	1,071,076	1,385,981	2,457,057	0.14%
2014	742,678	1,137,329	1,880,007	-23.49%
2015	760,688	1,152,314	1,913,002	1.76%
2016	805,033	1,139,384	1,944,417	1.64%
2017	818,440	1,170,383	1,988,823	2.28%
2018	877,015	1,290,679	2,167,694	8.99%
2019	796,304	1,217,406	2,013,710	-7.10%

Motorcycle	Growth
Wiotorcycle	Rate
1,634,113	-14.30%
2,024,599	23.90%
2,043,039	0.91%
2,606,161	27.56%
2,218,625	-14.87%
1,842,708	-16.94%
1,807,325	-1.92%
1,820,358	0.72%
2,055,193	12.90%
2,063,076	0.38%
1,948,047	-5.58%

Source: The Thai Automotive Industry Association

Domestic Market

The marketing strategies employed by the Company include increasing the number of agencies, providing discounts to agencies and establishing new distribution channels, such as car care centers and modern trade service centers, building brand awareness to consumers via advertisements through media, organizing marketing activities and promotion events.

- 1. Original Equipment Market (OEM) is a stable market with operational standard and clear production target and delivery date. Car assembly plants are the main customers of battery manufacturers because most consumers choose to replace old batteries with the same type and brand of battery that originally came with the vehicle. However, most of the car assembly plants in Thailand belong to or co-owned by Japanese firms. Most of these plants would mainly purchase batteries from their joint ventures in Thailand. As a result, manufacturers would have more difficulties when dealing with Japanese assembly plants than the Europe and U.S. assembly plants. This is opportunity for operators to expand their customer bases.
- Replacement Equipment Market (REM) This market has large product varieties in order to meet the
 diversified needs of consumers in the market and replace the original batteries that are damaged or



deteriorated. Presently, the REM is very competitive in terms of price, quality and product diversification offered from both domestic and overseas manufacturers.

The Company gives primary importance to the REM market, and the strategy employed is cutting costs while maintaining product quality. This strategy is implemented by increasing production in order to reduce the cost per unit and other costs by employing modern production technology, thus enabling minimization of raw material used while maintaining product quality and efficiency.

Table -Total Production and Domestic Automotive & Motorcycle Battery Sales (Units)

		2019	2018	2017
Total Production	(Pcs.)	18,391,157	17,684,027	18,290,467
Domestic Sales	(Pcs.)	12,146,632	11,642,948	12,170,447
International distribution	(Pcs.)	5,552,333	5,968,232	6,222,812
Total value of sales	(MB)	20,427	21,434	22,205

Source: Office of Industrial Economics

Export Market

The production efficiency of the Thai battery manufacturing industry continues to improve due to the implementation of highly efficient technologies and machinery in the production process to increase battery quality and standards in order to be widely accepted in the international arena.

Currently, the Company's target exports approximately 50 percent of the total revenue. The Company emphasizes on export market because of steady growth of global economy which impose positive impact on the automobile industry. The Company focuses on expanding export market into Asia-Pacific, Middle East, Africa and South America. In addition, the Company has set survey and field work strategy supporting upcoming AEC market.

Pricing Strategy

Most of the operators are using advertisement and promotions, especially rebates, to compete with one another in battery market. The Company has policy to maintain selling prices of products which are similar or equivalent to other brands. Price adjustment will be determined by the responsible management member of the Company.

Distribution and Sales Channels

The Company sells its products to both domestic and overseas markets. Domestic sales accounted for approximately 51 percent of the total revenue. Regarding this, 45 percent are car batteries, 4 percent are motorcycle batteries and 2 percent are other sales. The Company distributes products directly and through more than 200 retail stores and distributing agents. Regarding this, the Company has a policy to increase more distributing agents by turning our major customers to become our agents. This strategy will stimulate the Company's sales further.

The Company's export constitutes approximately 49 percent of the total sales. Regarding this, 46 percent are car batteries, 3 percent is motorcycle batteries. The Company sells products directly to end users or through distribution agents to more than 50 countries around the world in Indochina region, East Asia, Southeast Asia, South Asia, South America, Middle East and Africa. Furthermore, the Company plans to stimulate its sales through increasing number of distributing agents in both domestic and overseas markets.

The Company focuses on the export market because steady global upward growth trends have been experienced by this market. Another reason for this emphasis is to reduce the impact of the aggressive price competition in the domestic market. Accordingly, the Company's exports account for approximately 49 percent of the Company's sales revenue. At present, the Company exports products to over 50 countries in Indochina, East Asia, South-East Asia, South Asia, South America, Middle East, and Africa.

Characteristics and Relationship between the Company and Subsidiaries

<u>Thai Nonferrous Metal Company Limited.</u> The Company holds a total of 2,425,000 shares amounting to 97% of the total shares.

This subsidiary consists of a plant that recycles lead from used batteries. Much of the lead produced is sold to Hitachi Chemical Storage Battery (Thailand) Public Company Limited to minimize the effects of price volatility and raw material scarcity.

Subsidiaries on process of liquidation

- 1. **3K Products Company Limited.** The Company holds a total of 79,994 shares amounting to 99.99% of the total shares. This subsidiary was a product distributor and planner of strategic marketing plans for the Replacement Equipment Market (REM). It distributed products through more than 200 representatives covering all regions of Thailand with over 3,000 retail shops, but it is on process of liquidation, since all of its business was transferred to the Company.
- 2. Power Plas Company Limited. The Company holds a total of 4,999,998 shares amounting to 100% of the total shares. This subsidiary produced plastic casing for batteries, but it is on process of liquidation, since all of its business was transferred to the Company.



Sales by Products of Hitachi Chemical Storage Battery (Thailand) Public Company Limited

	2019		2018		2017	
	Thousand	%	Thousand	%	Thousand	%
	Baht		Baht		Baht	
Domestic Sales						
Automotive and Other Batteries	2,150,381	44.81	2,469,210	49.20	2,352,722	44.54
Motorcycle and Lighting Batteries	129,431	2.70	152,424	3.04	184,326	3.49
Other	188,549	3.93	270,752	5.39	286,630	5.43
Total Domestic Sales	2,468,361	51.43	2,892,386	57.63	2,823,678	53.45
Export Sales						
Automotive and Other Batteries	2,203,818	45.92	1,878,591	37.43	2,257,265	42.73
Motorcycle and Lighting Batteries	126,981	2.65	248,088	4.94	201,863	3.82
Other	-	-	-	-	-	-
Total Export Sales	2,330,799	48.57	2,126,679	42.37	2,459,128	46.55
Export and Domestic Sales						
Automotive and Other Batteries	4,354,199	90.73	4,357,801	86.63	4,609.987	87.26
Motorcycle and Lighting Batteries	256,412	5.34	400,512	7.98	386,189	7.31
Other	188,549	3.93	270,752	5.39	286,630	5.43
Total Export and Domestic Sales	4,799,160	100.00	5,019,065	100.00	5,282,806	100.0
Sales Growth (%)	(9.16)		(4.99)		(0.54)	

Production Capacity of Hitachi Chemical Storage Battery (Thailand) Public Company Limited

	2019	2018	2017
Full Production Capacity (unit: batteries)			
Automotive and Other Batteries	4,200,000	4,200,000	4,200,000
Motorcycle and Lighting Batteries	1,800,000	1,800,000	1,800,000
Total	6,000,000	6,000,000	6,000,000

RISK FACTORS

Raw Material Risk Factors

Over 60% of the raw materials used in the manufacture of Lead Acid Batteries are pure lead and lead alloy. Therefore, the fluctuations (increases or decreases) in lead prices will directly affect the operating profit. The degree of the impact depends upon the Company's ability to manage costs. In order to manage this risk factor, the Company has divided the raw material risk into two main factors:

1. Raw Material Procurement Risk Factors

Lead

Domestic production remains insufficient and the quality is not as required by the current demands of the battery industry. Thus, there is a need to import pure lead, especially, from exporters such as China and Australia, etc.

- For pure lead, the Company manages risks by seeking raw materials from foreign distributors. When raw materials have passed tests and met the Company's production standards criteria, an agreement is drafted for the purchase of pure lead to ensure sufficient supply to meet the Company's demands for the whole year.
- For lead alloy, the Company has managed risk by establishing Thai Nonferrous Metal Co., Ltd., a smelting plant that produces lead alloy from old batteries. The Company hopes to reduce the impacts of supply fluctuation with this risk prevention measure. The Company can also purchase lead alloy, which is equivalent in quality, from other suppliers.

Plastic

Domestic battery markets in Thailand have been growing continuously every year, resulting in the growing demand for parts used in producing batteries. The battery plastic casing is considered as a crucial part of the production and if the production cannot meet the demand due to the expanded battery markets, the Company prevents the risk from shortage by having the facility to manufacture the battery plastic casing inside the Company in addition to several supply channels outside the Company.

2. Raw Material Price Fluctuation Risks

Lead prices fluctuate depending upon supply and demand of the world market. The Company and its suppliers confirm prices one-month preceding delivery by referring to the market price of the London Metal Exchange. Another Company's main material is battery casing which is made from polypropylene (PP), another raw material with prices tied to the price of crude oil and fluctuate according to world market prices. The Company purchases the polypropylene (PP) directly from the manufacturers and delivers it to the battery casing manufacturers. This measure enables the Company to negotiate for proper raw material prices and ensures sufficient raw material supplies to meet demands.



Marketing Risk Factors

The Company's goal is becoming a leader in all types of lead-acid batteries. The Company's ratio for domestic sales and export is approximately 50:50 as a means of dispersing the impact of marketing risks.

1. Domestic Market Risk Factors

1.1 The domestic automotive battery market can be classified into the following two types of market: Original Equipment Market (OEM) is a stable market with operational standard and clear production target and delivery date. Car assembly plants are the main customers of battery manufacturers, because most consumers choose to replace old batteries with the same type and brand of battery that originally came with the vehicle. However, most of the car assembly plants in Thailand belong to or are co-owned by Japanese firms. Most of these plants would mainly purchase batteries from their joint ventures in Thailand. As a result, battery manufacturers would have more difficulties when dealing with Japanese assembly plants than the Europe and U.S. assembly plants. This is the opportunity for operators to expand their customer bases.

1.2 Replacement Equipment Market (REM) – This market has large product varieties in order to meet the diversified needs of consumers in the market and to replace the original batteries that are damaged or deteriorated. Presently, the REM is very competitive in terms of price, quality and product diversification offered from both domestic and overseas manufacturers.

In order to manage the REM risks and increase the Company's competitiveness, the Company has a policy to enhance sales potential by developing new products, improving packages' appearances and designing to be more modern and attractive. The Company also plans to publicize its brand by giving official support to sport activities. Furthermore, the Company also emphasizes on enhancing after-sales service through distribution channels under the name "3K Shop."

2. Export Market Risk

Automotive industry has been experiencing constant growth in the global market. This leads to increasing demand for batteries, particularly in the Asia-Pacific, Middle East and Africa region, as well as higher competition in the market. Our main competitors, in terms of price, quality, product varieties and marketing strategies, are manufacturers from Korea, China, India and Indonesia.

In managing export market risks, the Company has diversified its products, placed more suitable and tangible product positioning in each market, selected and recruited potential new dealers in the market in order to add distribution channels, adjust strategic plan for market expansion, prepare market surveys and research to analyze and determine more effective and competitive marketing plan.



Technological Risks

Despite rapid technological advances in battery manufacturing, the Company faces little risk due to technological changes in production, because the primary raw material remains lead, which is more commercially suitable than other more costly materials, such as Lithium. Also, we are focusing on battery for electric forklift whose market is still growing. Hence, developing technology for production procedures for lower production costs per unit is essential to the Company's competitive edge in the battery manufacturing industry. For this reason, the Company maintains policy for investments in modern machinery to minimize waste and improve production efficiency.

Exchange Rate Risk Factors

At present, the Company imports pure lead from overseas by paying in US dollars and thereby creating potential risks due to currency fluctuations.

Hence, the Company manages the aforementioned risk by exporting its products and receives payments in foreign currency such as US dollars and pays for imported raw materials with the same currency.

Risk from Interest Rate

The Company and its subsidiaries have the risk from significant interest rate related to the bank deposit, bank overdraft, short-term loan, and long-term loan with interests and liabilities according to the financial lease. Most financial assets and liabilities carry the interest rate which is changed in accordance with the market rate or carry the fixed interest rate similar to the current market rate. Significant financial assets and liabilities can be categorized based on the types of interest. For the assets and financial liabilities with fixed interest rate can be classified based on the maturity date or the repricing date (if this occurs before the maturity date)

Doubtful Debt Risk Factors

The Company is at risk in offering credit involving accounts receivable and trade debtors. However, the risk level is not high while the risk is manageable, and the debts remain collectable. The Company has a wide customer base, so Credit Control Department is responsible to approve credit and collect debts from each customer. For these reasons, the Company does not anticipate any significant losses due to the aforementioned debts. For existing agencies, the Company has shared good trade relationships for over 20 years, so existing agencies are unlikely to suspend or miss their payments to the Company.



Environmental Cost Management Risk Factors

Because lead is the main raw material in battery manufacturing industry, and lead is hazardous to health and environment, the Company must implement controls to prevent lead from contaminating the environment and establish measure to protect employees from exposure to the hazards of lead poisoning. In addition, the Company must operate under the supervision of various government agencies in compliance with regulations or laws enforced by these agencies. As a result, the Company will inevitably incur additional costs for environmental management aimed at meeting government regulations. The aforementioned costs are incomparable to the costs for curing the environment in the event of any environmental impact for which the Company is liable.

Coronavirus Disease 2019 (COVID-19) Risk Factors

The Company is currently facing the new strains of the corona virus that began to spread to from China in 2019 and continues to spread to neighboring countries including Thailand and many other countries. This may affect health of the Company employees and may stop their performing duties immediately and affect the operations of the Company.

To manage such risk, the Company continuously monitors news from the Ministry of Public Health and stipulates measures to prevent and closely monitor this type of virus infection. The Company also established the countermeasures against COVID-19 for both domestic and overseas relations to continue operation of the Company as much as possible.



SHAREHOLDER STRUCTURE AND MANAGEMENT

A list of the top ten shareholders containing share holdings and percentage of total shares at the most recent closing of the share register book on 25 April 2019 is as below.

Name	Number of shares	Percent of shares (%)	
SIAM MAGI COMPANY LIMITED	10,200,000	51.00%	
HITACHI CHEMICAL CO., LTD.	7,170,346	35.85%	
Mr. SOMI JOHNY ISSA MASSOUD	1,496,400	7.48%	
Mrs. KATIA ABOUD ABD ELMASIH	600,000	3.00%	
Ramkhamhaeng Hospital Public Company Limited	60,300	0.30%	
Mrs. SIRINEE RANGSIYAPORNRAT	55,000	0.28%	
Thai NVDR Company Limited	29,100	0.15%	
Mr. BOONKIET OUASUDKIT	28,000	0.14%	
Mr. SOMCHAD PONGPANAKRAI	25,600	0.13%	
Mr. JANE WIPAWAPANICH	23,000	0.12%	
	19,687,746	98.44%	

Management and Control

The Company's Board of Directors values the Code of Best Practices and Corporate Governance according to the guidelines set forth by the Stock Exchange of Thailand.

Management and Control Policy

The Company's Board of Directors is well aware of its roles and responsibilities as the directors of a registered company and promotes activities leading to excellent corporate governance in order to raise the Company's competitive advantage and build confidence in shareholders, investors and all parties concerned with efficient and transparent management. The Board's policy is for the Company to disclose all important and relevant information in an accurate, complete and timely manner in compliance with the regulations of the Stock Exchange of Thailand and the Security Exchange Commission. Moreover, the Company encourages its directors to adhere to "Code of Best Practice for Directors of Listed Companies" and "Best Practice Guidelines for Audit Committees" provided by the Stock Exchange of Thailand.



Shareholder Rights

The Company's Board of Directors gives equal value and supervision to the rights that shareholders have or should have, which not only includes legal rights, but also the rights to attend and vote in the shareholder's general meeting in order to decide upon major changes in management policies and to exercise their rights to remove directors and the rights to receive the profit. The Vice Chairman who is Chief Executive Officer of the Company is always present at the shareholders' general meeting to provide the shareholders an opportunity to ask questions regarding relevant matters. In addition, the Company also offers its shareholders the choice of appointing an Audit Committee Director, by proxy, when the shareholder is unable to attend the meeting.

Shareholders' Meeting

The Company holds the Annual General Meeting of Shareholders within four months from the end of each fiscal year whereby the Company sends documents containing the date, time, venue and agenda concerning discussions and voting activities to its shareholders seven days before the meeting. In the meeting, the Company allows shareholders to freely inquire, comment and suggest issues concerned with the Company's business operations. Furthermore, all key inquiries, comments and suggestions are accurately recorded in the minutes of the meeting for future reference and examination by shareholders.

The Company arranges for the Board of Directors, Audit Committee Directors, Executives officers, auditors and legal consultants to attend the meeting and answer questions from shareholders.

The Board of Directors has complied with good corporate governance as the followings:

- Record Date is used as a criteria to set shareholder list for the Annual General Meeting of Shareholders to allow shareholders to have sufficient time to consider the invitation.
- Notification of the meeting date is announced to shareholders one month in advance of the meeting date so that shareholders can plan and schedule their attendance.
- The Company will provide the opinions of the Board of Directors on each agenda with annual report and proxy form, which contains a detailed statement of evidence required for the proxy, enclosed together with the invitation letter.
- Before the meeting, the Chairman of the meeting explains how to vote and count the votes for each agenda item.
- During the meeting, shareholders are given the equal opportunity to express their views and make
 inquiries and the important issues are recorded in the minutes of the meeting. After the meeting, the
 minutes are published through the channels of The Stock Exchange of Thailand and the Company's
 website.



Equal Treatment of Shareholders

The Board of Directors has complied with good corporate governance as the followings:

- Publish the meeting document 30 days prior to the meeting date.
- Open opportunities for shareholders to propose agenda items for the Annual General Meeting of Shareholders and to nominate a person to be the director in advance from January 1 until February 15 by informing the shareholders through the channel of The Stock Exchange of Thailand. The Board of Directors holds the policy not to add unnecessary agenda without prior notice, especially the important agenda that shareholders need to take time to study the information before making decision.
- Encourages shareholders to use proxy forms that can determine voting direction (Form B) as well as to nominate two independent directors as an option for shareholders to appoint to attend the shareholders' meetings.
- Use voting cards on every agenda. Especially in the election of directors, the shareholders can vote individually, in which each person's votes equal to the number of shares he/she holds for one director election.
- Clearly state that the directors who have interest in the consideration have no right to vote and not to present at the meeting on such agenda.
- Establish an employee adherence to the Company's confidential information retention and not to exploit such information for himself/ herself or others.

Stakeholder Rights

The Company values the following important and related stakeholder rights:

Employees The Company deals with all employees equally and provides them with fair

and suitable returns.

Suppliers and Creditors The Company deals with all of its trade partners and creditors fairly and in

compliance with agreements.

Customers The Company shows responsibility for its customers by manufacturing quality

products that meet international standards and selling them at suitable prices.

Shareholders The Company operates at maximum capability to achieve good performance

so shareholders receive appropriate returns.

Competitors The Company adheres to legal regulations and good competition practices to

uphold the competition norm.





Community and Society The Company meets international standards for pollution treatment systems, while operating responsibly and ensuring that there are no impacts on the community or social environments.

The Company is highly conscious of manufacturing processes involving the use of lead as a raw material. Hence, the Company has carefully chosen to situate its plant inside an industrial estate regulated by the Industrial Estate Authority of Thailand and established strict preventive rules and regulations related to industrial operations for employees in addition to arranging for semi-annual physical check-ups.

Leadership and Vision

The Company's Board of Directors is composed of individuals with ability, knowledge and experience in the Company's business field to perform the duty of setting company policy and direction in addition to overseeing the management team in operating the business by established policies with responsibility, integrity and corporate governance in the interests of the Company and its shareholders.

The Company also places importance on efficient internal control and audit and review systems to ensure that the Company operates under legal regulations and good control. The Company has also established employment rules and regulations for compliance with employee guidelines to follow.

Board of Directors

The Board of Directors is not only required to comply with the law, objectives, regulations and shareholder's resolutions, but also has the following responsibilities:

- Determining the issuance of interim dividends to shareholders.
- Determining the issuance of awards, bonuses or other benefits to part-time and fulltime employees,
 except for the Board of Directors themselves
- In performing work in line with its responsibilities, the Board of Directors may appoint one or more directors or other individuals to act on a director's behalf.
- The Board of Directors holds at least one meeting every quarter.
- The Company's Board of Directors appoints a number of directors to be executive officers as deemed
 fitting with supervisory responsibilities as set forth by the Board.
- The Board is authorized to invite any individual to offer consultation involving the Company's operations to the Board.



Director and Executive Recruitment

The Company's Board of Directors consists of at least five directors, and more than half of the total number of directors must be Thai residents.

Nominations of directors have not been done by nominating committee, because the Company has not established nominating committee and appointments to the Company's directors are carried out by the shareholders' general meeting under the following criteria:

- 1. Each shareholder is entitled to one vote per share held.
- 2. Directors can be elected individually or as a group, depending upon the shareholders' preference. During the election, each shareholder must cast all of his/her votes for only one person. Shareholders are not permitted to divide votes between two or more nominees.
- 3. The nominees with the most votes are elected as directors in a descending order according to the quota for each election. If remaining directors have equal amounts of votes, the Chairman of the meeting shall make the final decision.

Dismissal of Directors

The meeting of common shareholders can dismiss a director or directors before the end of their term. This can be done in the shareholders' meeting with no less than 75 percent of the total votes, and the total shares must be no less than half of the shares present at the meeting with rights to vote.

No ratios have been set for directors representing each group of shareholders and rights of minor shareholders in the appointment of directors.

Balance of Power for Non-Executive Directors

The Company's current organizational structure contains one board of directors made up of 9 directors:

- 1. Executive Directors 3
- 2. Non-Executive Directors 3
- 3. Independent Directors 3

As a result, there are three independent directors, which accounts for 33.33 % of the total member of the Board.

Three Executive Directors are:

Name list	Scope of duties
1. Mr. Toshinori Osumi	Chief Executive Officer
2. Mr. Masamichi Saito	Chief Administrative Officer
3. Mr. Takahiro Tomiyama	Chief Technology Officer



Three Independent Directors are:

Name list	Independent Director
1. Mr. Nontaphon Nimsomboon	Chairman of the Audit Committee
2. Mr. Suchat Chanlawong	Audit Committee
3. Mr. Apichai Chvajarernpun	Audit Committee

Definition "Independent Committee"

The Company defines the "Independent Committee" in accordance with the Principle of the Good Corporate Governance and the SEC Rule of Practices to assure the investors and to maintain the equilibrium of effective management. Therefore, the Company defines "Independent Committee" as a committee, who does not take accountability in managing the Company, or subsidiaries, or joint ventures, and be independent out of management and potential shareholders, and has not engaged with the business of Company in the way that may restrict their expression of the independent opinion. "Independent Committee" shall be qualified as follows.

- 1. Being a person holding not more than 1% of the total number of shares with voting rights in the Company, affiliates or associated companies.
- 2. Have no participation in management or not an employee or consultant with salary. Not being a professional service provider, an auditor, an attorney or a professional who has limited opinion on performance of Company, affiliates or associated companies. Not the controlling person of the Company, affiliated company or associated company who may have a conflict of interest and must be vacated from the position or position that may arise at least for two years.
- 3. Have no business relationship in a manner that limits the independence of practice. No directorship duties which have a significant amount or value in proportion to the Company's income in accordance with the criteria and have no interest or interests, either directly or indirectly, in finance and administration of the Company, affiliates or associated companies. Not persons who may have conflicts of interest in a manner that would render the Company incapable of being independent.
- 4. Not close relatives of senior executives, major shareholders of the Company, affiliates associates or persons who may have conflict of interest and are not appointed as agents who maintain benefit of directors or major shareholder.
- 5. Not appointed to represent the interests of the Company's directors, major shareholders or shareholders who are related to the major shareholders of the Company.



6. Can perform duties and express opinions or report performance according to assigned duties by the Board of Directors independently without the control of managements or major shareholders of the Company, including those related or who are close relatives of such person.

These definitions are equivalent to the requirements set by the Securities and Exchange Commission and the Stock Exchange of Thailand.

Corporate Governance of Subsidiary and Joint Venture Company

Nomination and casting votes for appointing directors in the subsidiaries will be implemented by the management. The nomination and exercising of such right must be approved by the Board of Directors as well. Any persons appointed to be a director in the subsidiaries will be responsible for implementing the best performance for that subsidiary. In addition, the Company has established that such appointed person must be approved by the Board of Directors before resolving a resolution or exercising the right to cast a vote on significant matters at the same level being approved by the Board of Directors in case of the operation of that Company.

Additionally, in case of subsidiaries, any persons appointed by that company will be responsible for establishing the subsidiary's regulations on the connected transactions-related company, collecting data and recording accounts so that the Company is able to audit and collect for providing consolidated financial statements in time.



Director and Executive Remuneration

During 2019, director remuneration comprised of the following meeting allowances and individual director bonuses.

No.	Director's Name	Position	Remuneration (Baht)			
			Remark	Board of	Audit	
				Directors	Committee	Total
1	Mr. Yoshito Ishii	Chairman of Board of Directors		-	-	-
2	Mr. Toshinori Osumi	Vice Chairman		-	-	-
3	Mr. Hiroaki Yamaguchi	Director		-	-	-
4	Mr. Naoto Okada	Director		-	-	-
5	Mr. Yoshihiro Nomura	Director	Resigned 25/04/2019	-	-	-
6	Mr. Masamichi Saito	Director		-	-	-
7	Mr. Takahiro Tomiyama	Director		-	-	-
8	Mr. Nontaphon Nimsomboon	Chairman of Audit Committee, Independent Director		325,000	120,000	445,000
9	Mr. Suchat Chanlawong	Audit Committee, Independent Director		325,000	72,000	397,000
10	Mr. Apichai Chvajarernpun	Audit Committee, Independent Director		325,000	72,000	397,000
			975,000	264,000	1,239,000	

In the Annual General Meeting of Shareholders of 2019, a resolution was passed to approve remuneration for directors within a limit of no more than 2 million baht. This resolution will be effective until the shareholders make changes for other arrangements. At present, the Company has no subcommittee to set remuneration rates. However, there are proper consideration processes by using information from other companies in the same industry and of comparable size. Company performance is also used in the process of consideration.

Directors who are employees or executive officers of Hitachi Chemical Co., Ltd. do not receive allowances and bonus. Directors who are employees or executive officers of Hitachi Chemical Co., Ltd. are as follows:

1. Mr. Yoshihiro Nomura As director on 25 July 2017

2. Mr. Toshinori Osumi As director on 25 July 2017

3. Mr. Hiroaki Yamaguchi As director on 27 September 2017

4. Mr. Naoto Okada As director on 27 September 2017

5. Mr. Yoshito Ishii As director on 25 April 2019

6. Mr. Masamichi Saito As director on 25 April 2019

7. Mr. Takahiro Tomiyama As director on 25 April 2019

Furthermore, consideration of executive remuneration, which includes salary, bonuses and other benefits (fuel expenses, telephone allowances, food expenses, etc.), is based mainly upon Company performance, including evaluations of individual management performance. In 2019, the total compensation for 14 executives was at amount of 60.01 million baht, the average per person per year was 4.28 million baht for both monetary and non-monetary remuneration.

Director's remuneration in the past three years are as follows:

No.	Director's Name	Amount (Baht)					
		201	9	2018		2017	
		Allowances	Bonus	Allowances	Bonus	Allowances	Bonus
1	Mr. Yoshito Ishii	-	-	-	-	-	-
2	Mr. Toshinori Osumi	-	-	-	-	-	-
3	Mr. Hiroaki Yamaguchi	-	-	-	-	-	-
4	Mr. Naoto Okada	-	-	-	-	-	-
5	Mr. Yoshihiro Nomura	-	-	-	-	-	-
6	Mr. Masamichi Saito	-	-	-	-	-	-
7	Mr. Takahiro Tomiyama	-	1	1	1	-	-
8	Mr. Nontaphon Nimsomboon	245,000	200,000	230,000	200,000	280,000	200,000
9	Mr. Suchat Chanlawong	197,000	200,000	190,000	200,000	232,000	200,000
10	Mr. Apichai Chvajarernpun	197,000	200,000	178,000	200,000	160,000	200,000
Total		639,000	600,000	598,000	600,000	672,000	600,000



Board of Directors Meetings

With highly proficiency of management experience, now the Company has 9 sophisticated board of directors, which one is able to take three-year-period position with unrestricted period frequency. All details of each delegated person are as followings:

No.	Director's Name	Position	Accreditation Year	Latest Accreditation Year	Next Accreditation Year	Been Appointed/ Nominated as One of Board Members for Year 2020
1	Mr. Yoshito Ishii	Chairman of Board of Directors	2019	-	2022	-
2	Mr. Toshinori Osumi	Vice Chairman	2017	2019	2021	-
3	Mr. Hiroaki Yamaguchi	Director	2017	2019	2022	-
4	Mr. Naoto Okada	Director	2017	-	2020	No
5	Mr. Masamichi Saito	Director	2019	-	2022	-
6	Mr. Takahiro Tomiyama	Director	2019	-	2022	-
7	Mr. Nontaphon Nimsomboon	Chairman of the Audit Committee, Independent Director	1998	2019	2021	-
8	Mr. Suchat Chanlawong	Audit Committee, Independent Director	1997	2018	2021	-
9	Mr. Apichai Chvajarernpun	Audit Committee, Independent Director	2009	2017	2020	Yes
10	Vacancy	Director	2017	Resigned 06/12/2018	2021	-
11	Vacancy	Director	2000	Resigned 27/09/2017	2020	No
12	Vacancy	Director	2005	Resigned 27/09/2017	2020	No
13	Mr. Yoshihiro Nomura	Chairman of Board of Directors	2017	Resigned 25/04/2019	-	-



The Company will send invitations for every Board of Directors meeting along with the meeting agenda and accompanying documents at least seven days before the meeting so the Company's directors will have sufficient time to prepare for the meeting. Furthermore, the minutes to the meeting will be recorded in writing with copies for each director and one copy of the minutes will be kept at the Company's office for the inspection of related individuals. Mr. Wirachai Bunchuchuen is corporate secretary of the meetings.

Secretary of the Company

The Board of Directors passed the resolution of appointing Mr. Wirachai Bunchuchuen to be the secretary of the Company on 26 February 2008.

The Biography of Company Secretary

- Mr. Wirachai Bunchuchuen
- B.Acc : Faculty of Economices and Business Administration, Kasetsart University
- Master of Accoutancy, Faculty of Management and Tourism Burapha University
 In the past year, the Board of Directors held five meetings. Each director attended the meetings as follows:

No.	Director's Name	Position	Meeting		Proportion	
			Board of	Audit	Shareholder's	Holding
			Directors	Committee	Meeting	Company
	Mr. Yoshito Ishii	Chairman of Board of				
1		Directors	3/4	-	0/1	-
2	Mr. Toshinori Osumi	Vice Chairman	5/5	-	1/1	-
3	Mr. Hiroaki Yamaguchi	Director	4/5	-	0/1	-
4	Mr. Naoto Okada	Director	4/5	-	0/1	-
5	Mr. Masamichi Saito	Director	4/4	-	0/0	-
6	Mr. Takahiro Tomiyama	Director	4/4	-	0/0	-
7	Mr. Nontaphon Nimsomboon	Chairman of the Audit Committee, Independent Director	5/5	6/6	1/1	-
	Mr. Sughat Chaplayyana	Audit Committee,				
8	Mr. Suchat Chanlawong	Independent Director	5/5	6/6	1/1	-
	Mr. Apichai Chvajarernpun	Audit Committee,				
9	wii. Apiciiai Ciivajareinpuli	Independent Director	5/5	6/6	1/1	-



Directors who resigned during the year attended the Board of Directors' Meeting as follows:

No.	Director's Name	Position	Meeting		Proportion	
			Board of	Audit	Shareholder's	Holding
			Directors	Committee	Meeting	Company
1	Mr. Yoshihiro Nomura	Chairman of Board of Directors	1/1	-	0/1	-

Subcommittees

At present, the Company has only one subcommittee consisting of the Audit Committee which was established on 14 December 1999 with a committee term of two years. Currently, there are three directors on the Audit Committee.

Mr. Nontaphon Nimsomboon Chairman of the Audit Committee

Mr. Suchat Chanlawong Audit Committee

Mr. Apichai Chvajarernpun Audit Committee

Mr. Nontaphon Nimsomboon is Chairman of the Audit Committee who has knowledge and experiences in reviewing the financial statements of the Company. The chief of the Internal Audit Department was appointed to be the secretary of the Audit Committee.

The Audit Committee has established the scope of authorization, duty, and responsibility of the Audit Committee. It focuses on the efficient mechanism of the Board of the Company for supervising the operations of departments of the Company and other sections in the Group to ensure that they are in compliance with good corporate governance principles, including providing the appropriate risk management, qualified internal control system and internal audit. These will help the Company to be an efficient, well accepted, and reliable organization based on the vision of the Company and the Charter of the Audit Committee approved by the Board of Directors on February 24, 2015.

The Audit Committee must report relevant matters to the Board of Directors. Their primary responsibilities are:

- Reviewing the internal performance and providing suggestions to the Board of Directors and/or the Management in case
 the Audit Committee is of the opinion that such suggestions are useful to the efficient governance and compliance of
 each department and achieve the objectives in line with the good governance principles.
- Reviewing the internal control system, risk management, and security of the Company's information technology to be concisely and effectively in accordance with the generally accepted standards.
- Reviewing the Company's operation to ensure that it is in compliance with policies, plans, rules, regulations, related laws, and ethical requirements.
- 4. Reviewing the accuracy and appropriateness of applied accounting policies and the financial reports of the Company and sections under the Group to ensure that they are accurate and reliable, and disclosing sufficient information in conformity with generally accepted accounting principles.



- Selecting and nominating an appropriate person to be the Company's auditor, and fixing the proper remuneration of the auditor so that the Board of Directors and shareholders can approve, respectively under the scope of related laws and regulations.
- 6. Promoting the independence of external auditors and supporting the operation of internal auditors to ensure that it is independent, accurate, and compliant with generally accepted standards, including encouraging the coordination among the management of the Company, external auditors, and internal auditors appropriately and sufficiently.
- 7. Studying letters submitted by external auditors to directors of the Company, reporting observations and suggestions relating to weakness, irregular statement, or significant error detected from the audit, considering and providing opinions to the Board of Directors. In case such observations or suggestions are not considered or implemented without sufficient reasons, discussing with the management and presenting to the Board of Directors for reconsideration.
- Providing advices relating to appointment, withdrawal, and transfer of the chief of the Internal Audit Department to the Chief Executive Officer of the Company.
- Providing advices relating to annually considering on merits of employees in the executive level and internal auditors to the Chief Executive Officer of the Company.
- 10. Supervising, advising, and supporting the independent operations of internal auditors reviewing the audit report of the internal auditors.
- 11. Granting an approval of action plans and audit plans, manpower plan, and the plan for development of knowledge, skill, and specific characteristics of personnel in the Internal Audit Department.
- 12. Reviewing conflict of interests between the Company and directors, executives, or employees of the Company.
- 13. Reviewing the summary and supporting evidence in case employees or directors possibly perform fraudulent act or abuse of official functions which cause damages to the Company, presenting such reviewing results to the Board of Directors for consideration immediately.
- 14. Auditing and revising the Company's rules, regulations, and practices regarding to authorization of internal auditors at regular intervals, at least every year, to ensure that they are appropriate and up-to-date, and provide sufficient independence to the internal auditors for the efficient operations. In this regard, the Audit Committee proposes the limitation and possibly existing weakness to the Board of Directors in order to modify and improve it.
- 15. Other issues assigned by the Board of Directors.

Internal Audit

In 2019, the chief of the Internal Audit Department is Miss. Patitta Arreesanan. The chief of the Internal Audit Department and the Audit Committee commented that auditors have performed their duties efficiently and suggested the executives of the Company to develop knowledge and skills of auditors since having good auditors will cause valuable benefits to the Company in the future.

Managing Conflicts of Interest

The Board of Directors will make decisions for cases involving transactions with conflicts of interests in order to maximize the Company's benefits. Furthermore, if conflicts of interest arise, the Audit Committee shall be responsible for



rectifying the conflict. Related financial accounts must also be fully disclosed in the addendums to financial statements. The Audit Committee is also responsible for reviewing such matters.

Business Ethics

The Company strictly adheres to good business ethics in line with best practice associated with the corporate governance standards set forth by the Stock Exchange of Thailand. The Board of Directors, management teams and employees must follow company regulations and the Code of Best Practice for Directors of Listed Companies.

Internal Audit and Control Systems

Concerning the sufficiency and suitability of internal control, the Board of Directors defers to the opinions of the Audit Committee. Concerning risk management, the Board of Directors has not set up a specific committee for risk management. Therefore, risk management remains under the direct control and supervision of the Board of Directors.

Board of Directors Reports

The Board of Directors is well aware of its responsibilities as directors of a listed company in ensuring the accuracy and completeness of the Company's financial reports in terms of accounting information, including compliance with Generally Accepted Accounting Principles (GAAP) to help shareholders understand the Company's actual financial situation and performance.

The Board of Directors views the Company's financial statement for 2019, which has been audited by certified external auditors and reviewed by the Audit Committee, as being complete, correct, reliable and compliant with Generally Accepted Accounting Principles with use and regular adherence to proper accounting policy. The information disclosed is sufficient and in accordance with relevant laws and regulations.

Investor Relationships

The Board of Directors places great importance in the disclosure of information with impact on the Company's share price. The Company's management team has ensured the disclosure of information is accurate, reliable and thorough. The Company publicizes its information through the channels provided by the Stock Exchange of Thailand. The Company has also assigned

Mr. Wirachai Bunchuchuen to perform duty of investor relations. For more information, investors may call 02-709-3535, extension 1501, during office hours.

Controlling Use of Insider Information

The Company has issued policy to control the usage of insider information for personal gain. This code of conduct is as follows:



- Directors, managers, spouses or children under 18 must not disclose to the public any insider information for the
 purpose of buying, selling, transferring or receiving transfer of shares issued by the Company, which means adherence
 to the laws governing securities businesses. Moreover, the aforementioned must notify the Company of such activities
 for the Company's subsequent reports.
- 2. Directors, managers, spouses or children who are minors must not buy, sell, transfer or receive transfer of shares issued by the Company for a period of one month before public disclosure of the Company's financial statement. The Company will consider penalties for individuals found in violation of the aforementioned code as deemed fitting in each case e.g. verbal or written warning, probation, suspension, decommission or dismissal, depending upon the case. In addition, the Company has instructed the executives regarding their duties in reporting Company shares held and set penalties according to the Security and Stock Exchange Act (1992) and the stipulations of the Stock Exchange of Thailand.

Dividend Payment Policy

The Company has policy for paying "Not exceeding 50% of net profit from separate financial statements (with additional conditions)" as dividend to its shareholders. However, the Company's dividend payments must be in accordance with the law under the Public Company Act 1992, Section 115. The policy stipulating that subsidiaries must pay dividend to the Company, according to the annual net profit ratio of each company compared to the dividend that the Company is required to pay to shareholders, shall be used as a guideline.





THE SUSTAINABLE DEVELOPMENT

Sustainability

The Board of Directors has policies and operations of the Company and its subsidiaries by adhering to corporate and social sustainability which is part of our business procedures.

To focus on the effectiveness of social responsibility through sustainability, the framework of the report which are internationally accepted is as follows:

- 1. Corporate governance
- Business conduct with fairness
- 3. Anti-corruption
- 4. Respect for human rights
- 5. Fair labor practices
- 6. Consumer responsibility
- 7. Environmental preservation and Energy conservation
- 8. Social and community development
- 9. Innovation and Dissemination of innovation
- 10. Sustainability report

1. Corporate Governance

We will operate the business in accordance with the laws relating to the business of the Company. We must maintain the steps and procedures in conducting honest business. We are confident that conducting business under the scope of honesty, morality and ethics is a good business policy, which will result in sustainable business growth. We respect and adhere to local traditions

We will operate its business with honesty. This includes financial policy, budget scheme and evaluation of investment in various projects concisely and transparently. We will aim for all directors, executives and employees are of the Company to faithfully adhere to the Company's policy and accounting process and other measures. The employees of the Company are anticipated to report to the management team directly on any suspicions of organizational ethical violation which may be responsible for the offense or detrimental to the Company's reputation.



The Company has provided the Code of Conduct and communicated with employees to enhance their understanding so that the Code of Conduct could sufficiently be implemented.

2. Code of Conduct

We will treat all business partners equitably and fairly with integrity, as well as have respect to intellectual property including:

2.1 Fair Trading

- To ensure fair and open competition, we will observe the fundamental rules of trade, including domestic and overseas competition laws and regulations, and act in compliance with legislation and sound corporate ethics.
- We will have no relationship whatsoever with antisocial forces anywhere in the world, and resolutely reject involvement in improper or antisocial transactions.
- We will not trade shares using undisclosed information regarding the Group, affiliated companies, business partners, or customers that could affect the judgment of investors (insider information).
- We strictly prohibit and will have no involvement in bribery and other corrupt business
 practices. We will neither give or receive gifts nor extend or accept invitations to business
 entertainment beyond socially accepted limits, as we recognize that such practices can
 foster corruption. When working with political entities, we will build and maintain sound
 and transparent relationships.
- We will help maintain international peace and security through compliance with all
 applicable laws and regulations concerning import and export and will operate
 appropriately according to our internal rules and policies.
- We will comply with applicable laws, respect social cultures and practices, and act sincerely and fairly in countries and regions where we have operations. Furthermore, we will do so guided by international norms and standards even in areas where legislation is not adequately enforced.

2.2 Relationships with Suppliers

 With a global vision, and mindful of the long-term perspective, we will find qualified suppliers and build fair and equal partnerships with them, working together to build mutual understanding and trust.



- In selecting suppliers, we will thoroughly review the quality, reliability, delivery time, and price of the materials they provide as well as their business stability and technological capability. We will give due consideration to their adoption of social responsibility practices, including areas such as the abolition of unfair discrimination, the elimination of child labor and forced labor, and environmental conservation.
- We will not accept any personal benefits from suppliers in procurement transactions.

2.3 Relationships with Customers

- We will provide products and services that meet the needs and requirements of our customers, complying with relevant laws and standards and ensuring quality and safety by setting additional standards of our own where necessary.
- We will communicate with customers sincerely, address defects and customer complaints
 quickly and in good faith and strive to determine causes in order to eliminate them and
 prevent recurrence.

2.4 Protection of Intellectual Property and Brand

- We will protect our own intellectual property, respect third-party intellectual property, and use both effectively for smooth business operations.
- We will manage our own and third-party confidential information by importance and manage and handle it appropriately based on this ranking.
- We will protect and enhance the value of the Hitachi Chemical Brand, recognizing it as an important management asset.

3. Anti-corruption:

The Company declares not to provide or accept any objects or benefits that influence decision-making in the performance of duties. (Anti-corruption policy)

Guidelines for Practice

- It is forbidden for directors, executives and employees to provide or receive items or other benefits to or from persons who are related to the Company.
- In cases where partners are involved in fraudulent activity, the Company reserves the right to suspend the business immediately.



The Board of Directors had and promulgated an Anti-Corruption Policy as follows:

Directors, executives and employees of the Company must not accept fraud in any form, either directly or indirectly, such as offering a commission or gift in order to supply suppliers or suppliers of governmental or governmental suppliers or related persons and vice versa. However, this prohibition does not include gifts such as the appropriate festive or traditional gift that the recipient will receive is reasonable.

4. Respect for Human Rights:

The Company respects human rights and respects the human dignity of all employees, which is the foundation of the business.

Guidelines for Practice

- Manage work environment and system to ensure employees' safety of life, property and to have work condition with good hygiene.
- Provide health insurance for employees.
- Establish provident fund for employees.

In 2019, the Company has conducted the following activities.

- 1. Medical and health checks up for all employees and managements
- 2. Distribution of drinking milk to all employees and managements daily

5. Fair Labor Practices:

The Company treats employees fairly according to the principles of universal human rights and good ethics to lead a peaceful society.

Guidelines for Practice

- Not restricting races, colors, genders, religions and nationalities in employment considerations and following laws relating to employment of people with disabilities.
- Encouraging employees to regularly develop their skills and knowledge.
- Fairness in employment terms and conditions including reasonable compensations in the form of wages, salaries and bonuses based on their competency.
- Appointing and transferring the staff honestly and based on their knowledge, ability and suitability.
- Strictly following the laws and regulations in relation with employees.



6. Consumer Responsibility

The Company practices the ISO / TS 16949 quality management system with the quality policy of "Producing quality products and creating satisfaction for customers along with an ongoing quality improvement" so purchasers can be assured that in addition to receiving quality goods at fair prices. The Company is also aware of the safety that may affect the environment.

Guidelines for Practice

- The Rights of Trade Confidentiality: the Company has taken measures to maintain the confidentiality of our customers and will not use our customers' data for the benefit of ourselves or others.
- The Rights to Express Opinions: the Company has a process for customer enquiry and complaints regarding the quality, quantity and safety of the products, as well as being speedy responsive.
- The Rights to Receive Compensations: our customers receive a fair conduct in the case that our products did not meet the standards by setting the warranty under reasonable terms and periods which must comply with the Consumer Protection Act.
- The Rights to Information: the Company provides sufficiently and timely information and advice concerning products to customers.

2019 Automotive (OEM) Customers' Satisfaction Survey Results Importance placed on the followings:

Product quality performance	97.00%	Satisfaction	80.00 %
Personnel's responsiveness	96.00%	Satisfaction	80.00 %
Completeness of product delivered	90.00%	Satisfaction	90.00%

7. Environmental Preservation and Energy Conservation:

The Company practices the ISO14001:2015 Environmental Management System with the policy of ongoing environmental improvement procedures and conducts, as well as to prevent pollutions caused by the products, services and activities in the production of the Company's batteries, in which the managements and employees are committed to the following.

Guidelines for Environmental Management Practices

• Strictly conduct all actions to comply with the laws, rules and regulations concerning the environment, which are relating to the Company.



- Strive to improve, control and reduce the environmental impact of air, water and soil pollution
 effectively and to be higher than the standard for control and protection of environmental
 impact, as well as conserve energy and resources with maximum efficiency.
- Strive to improve the environmental management system by setting clear goals and objectives.
 And to achieve the objectives and environmental goals by reviewing the objectives and environmental goals annually.
- Promote understanding and raise awareness concerning the environments to all employees
 within the Company by enhancing communication and environmental training.
- Disclose policies and information regarding the environmental policies to public and jointly develop the environment with the community.

The Company has been focusing on maximizing the use of resources to generate the highest effective outcome by following The Energy Promotion Conservation Act (No. 2) B.E. 2550 (2007) concrete actions. In 2019, the Company conducted the following activities.

- 1. Energy conservation measures
 - Change sky light of 2 factories building, as a result, Hitachi Chemical Storage Battery (Thailand) PLC. can turnoff lighting high bay 100-watt quantity = 17 units during daytime, energy saving of 31,104 kWh / year
- 2. The Company has appointed the Energy Committee to control environmental management with the following plans:
 - Control of electrical usage
 - Control of water usage
 - Control of gas usage
 - Passing 100% standard of air emissions control
 - 100% waste separation

To continue with effective energy management operations and to meet the notification of the Ministry of Energy on the principles and methods of energy management in the factory and control buildings in 2009, the Energy Management Review Board has been appointed. It is responsible for monitoring and evaluating energy management within the organization; carry out audit on document and evidence related to energy management regarding whether or not it is completed; and summarize the monitoring results of the energy management operations.



3. The pollution preventions and monitoring of the environmental impacts with the ongoing environmental measurements

Air Quality

The Company has been using natural gas to fuel the production process to reduce amounts of air pollutions such as Nitrogen (NOx), Sulphur Oxides (SOx), etc. There is high performance air pollution treatment system installed such as dust collectors, wet scrubbers, etc. before the air being released into the environment. There is regular maintenance performed by the experts, regular air quality testing and measurement both in the workplace and regular ventilators, as well as strictly following the official laws and regulations.

Water Quality

The Company installed wastewater control system for water released from the production process by using chemical treatment to accelerate the precipitation and precautious on the wastewater quality at risk on the daily, weekly and monthly productions. At the same time, the Company strictly monitors wastewater samples to find the parameter as implied by laws at wastewater discharge points. Wastewater measurement and analysis results are according to standard implied by laws.

Industrial Wastes

The Company has a systematic industrial wastes management and has assigned specialists to manage industrial wastes, to perform the duty of controlling and eliminating industrial waste to meet the requirements as implied by laws.

Summary of 2019 Environmental Measurements

F ' (10 P)	Year 2019		1 10 %			
Environmental Quality	(Jan-Jun)	(Jul-Dec)	Legal Criteria			
Air Quality from the ventilators						
Amount of TSP released(mg/m ³)	1.9 – 45	2.2 - 7.1	≤ 400			
Amount of H ₂ SO ₄ released (ppm)	0.001 - 0.004	0.001 - 0.05	≤ 25			
Amount of Pb released (mg/m ³)	0.005 - 0.933	0.009 - 0.796	≤ 30			
Amount of SO ₂ released (ppm)	<1.3	<1.3	≤ 60			
Amount of NO _x released (ppm)	<1.1 – 2.5	2.2 - 2.4	≤ 200			
Amount of CO released (ppm)	24 - 120	<20	≤ 690			
Workplace air quality						
Amount of Total dust (mg/m ³)	0.125 – 2.157		≤ 10 (ACGIH)			
Amount of H ₂ SO ₄ (mg/m ³)	0.073 - 0.141		≤2 (ACGIH)			
Amount of Pb (mg/m ³)	0.005 - 0.029		≤ 0.05 (ACGIH)			
Amount of Asbestos (f/cc)	0.005 - 0.009		≤ 0.1(ACGIH)			
Workplace noise quality						
Average workplace noise level in 8 hrs- Leq 8 hr (dB(A))	76.6 – 82.2		≤ 85			
Workplace highest noise level-Lmax (dB(A))	99.6		≤ 115			
Average noise level in 24 hrs. within factory premise- Leq 24 hr (dB(A))	58.6		≤ 70			
Highest noise level within factory L max (dB(A))	86.4		≤115			

- Promote the knowledge relating to environment among employees so that they have better understanding, as well as cultivate this knowledge into our corporate culture which leads to sustainable practices as follows:
 - 1. Offered environmental training program to all new employees
 - 2. Offered environmental training program



- 3. Offered safety training program
- 4. Offered EMS ISO 14001 program
- 5. Offered INTERNAL AUDIT ISO14001 program
- 6. Offered electrical safety training program
- 7. Offered initial firefighting training and evacuation program and fire drills
- 8. Offered training program for safety officers, supervisors and annual administration safety officers

8. Community or Social Development:

The Company has committed to develop and promote our employees together with the development of the surrounding community and society to flourish alongside with our business operation in order to grow together sustainably.

Guidelines for Practice

- The opening of the factory as a learning center for various agencies to visit factory: To promote learning with the Company and government agencies and various institute, the Company has the policy to open the factory to interested parties to learn the production management system and quality control of the Company.
- The Company has encouraged employees to be good people of society.

In 2019, the Company has organized the following activities:

Supporting conservation activities for the restoration of mangrove forests and Kham Khlong on 16
August 2019.











2. Donate gifts to the National Children's Day for the year 2019 on 11 January 2019.





3. Blood donation to make a good charity to Rama 10 on 4 December 2019.











4. Offering a flower basket in front of the King Phra Worawong Jao Somsavali Krommuen Sutharienat on 16 July 2019.







5. CSR Project by donation closing and 40 bags of miscellaneous items to "Suan Kaew Foundation", Bang Yai District, Nonthaburi Province, to be used to help brothers in needy areas on November 6, 2019





6 . Kathin Ceremony at Khotaram Temple, Bang Phriang Subdistrict, Bang Bo District, Samut Prakan Province on 27 October 2019.











 Give premiums to schools and various organizations. In order to use appropriately on 4 April 2019.







9. <u>Innovation and Dissemination Innovation:</u>

Innovation dissemination from responsible operations to the society, environment and the stakeholders: The Company had the ability to design and manufacture products responsibly for the stakeholders and the society in order to lead to long-term value creation for the organization.

Our activity of sustainable development.

- Our company has the ability to design and manufacture environmentally friendly products which can reduce oil consumption and greenhouse gas emissions, such as
 - O Traction batteries for electric folk lift powered by battery energy
 - O Battery for solar panels to support clean energy



- The Company invested for the expanding production capacity for Traction battery for electric forklift. It can contribute more to reduce the greenhouse gas emissions and keep clean air in the operation area. The Company has also developed the long-life type Traction battery to further reduce waste materials.
- The Company has developed the long-life Automotive maintenance free battery.
 We also have developed new active material which can reduce the usage of electricity during charging. Therefore, we can further reduce the greenhouse gas emissions and waste materials.
- The Company is doing any activity to enhance productivity and reduce the material loss through the continuing improvement to supply sufficient product to the customers.

10. Sustainability Report:

The Company has been preparing the Sustainability Report in order to gather responsibility guides, organizational directions, organizational core information, directions and scopes in term of economy, environment and security aspects.



RELATED TRANSACTIONS

In 2019, the Company had transactions with its subsidiaries and related companies, which were related through same shareholders and/or joint directors and management. The majority of the transactions were buying and selling of products, which were in accordance with conditions agreed between the Company and related companies, and in-line with general business practices. The Company had disclosed such transactions in the Note Number 6 of the annual financial statement, ending on December 31, 2019, which possessed the following details:

1. Measures and Procedures for Approval of Inter-Transaction

The Company has regulated the measures for controlling the inter-transactions between the Company, subsidiaries, joint ventures, and subsidiaries of the similar level and stakeholders or persons those who may engage of the futuristic interest conflict according to the Announcement of the Securities and the Exchange Commission. In doing so, the Audit Committee shall comment pertaining to the necessity of transactions and appropriateness of inventory prices based on conditions in normal commercial manner and compare price with that occurred with the outsiders.

In case that the Audit Committee have not specialized in contemplating the inter-transaction occurred, the Company shall provide the independent specialists or internal auditor to make comments on such inter transactions so that it will be used to support the decision-making of the Board of Directors and/or Audit Committee and/or shareholders, as the case may be. Those individuals engaging with interest conflict or stakeholders in the inter-transactions shall have no right of voting for approval of such respective inter-transactions. Moreover, the Company shall disclose the related transactions, acquisition, or distribution of the important assets of the Company and its subsidiaries according to the Stock and Exchange Commission's requirements, as well as the accounting standard imposed by the Institute of Certificated Public Accounts and Auditors of Thailand.

2. Policy and Futuristic Tendency toward Inter-Transactions

In the future, if there will be the inter-transactions, the Company shall apply the Securities and Exchange Commission Act, rules, announcement, order, or regulations required by the Stock Exchange of Thailand and the accounting standard required by Institute of Certificated Public Accounts and Auditors of Thailand. Under all of these, such inter-transaction shall not be construed

as transfer or assignment for the interests of the Company and Company's specific shareholders, but it shall be considered for the highest interest of all shareholders.

In case of normal commercial transactions and continuing transactions in the future, the Company shall arrange such transactions in accordance with normal commerce by referring to price and conditions for proper, fair, reasonable and identifiable normal trade, and will not cause transfer of the interest. Such arrangement shall be submitted to the Audit Committee for approval, and shall be further implemented by the management under the Securities and Exchange Commission Act, rules, announcement, order, or regulations required by the Stock Exchange of Thailand and the accounting standard required by Institute of Certificated Public Accounts and Auditors of Thailand. In some cases toned above, the management can proceed immediately without the consent of the Audit Committee. However, to meet the Good Corporate Governance, the Company requires that Internal Audit shall perform auditing on all such transactions on a monthly basis to see if the prices refer to the market price, and conditions and terms of normal trade are competitive as compared to the outsider traders. This is to maintain the highest benefits of the Company. The results of auditing shall be submitted and informed to the Audit Committee on quarterly basis. In case it is proven by Audit Committee that the execution has been inconsistent with the required policy, the Audit Committee shall notify the Company's Board of Directors or Chief Executive Officer for correction.

In respect of normal commercial transactions of the Company, it shall be characterized of normal business. If the related transactions are not carried out, the similar transactions engaging with other persons shall be conducted wherein such respective transactions shall include the conditions and terms of ordinary trade; including price and fair conditions that might not cause the transfer of interest as well as the following conditions and prices:

- 1. Price and conditions accepted by Company is similar to that of general persons.
- 2. Price and conditions accepted by related persons is similar to that of general persons.
- 3. Price and conditions manifested by the Company is that of other operators to follow in the similar way to general persons.

However, in case that the inter-transactions are characterized different from the above, the Company shall submit them to the Audit Committee to make comments on appropriateness of price,



soundness of such respective transactions. In case that the Audit Committee has not specialized in contemplating the inter-transaction occurred, the Company shall provide the independent specialists or internal auditor to make comments on such interring actions so that it will be used to support the decision making of the Board of Directors and/or Audit Committee and/or shareholders, as the case may be. This is to ensure that such transactions shall not be transfer or assignment of the interest between the Company and specific shareholders, and the highest interest of all shareholders shall be considered.

1. 3K Products Company Limited

Descriptions of Relationship The Company holds 99.99 percent of fully paid-up and registered

capital. This juristic person includes a common director.

Type of Business Distributing agent of batteries for automobiles, golf carts, general

lighting, and motorcycles.

Pricing Policy The Company sells its goods to 3K Products Company Limited,

which is the sole distributor in Thailand. The transactions are

conducted under regular conditions, the same as those of non-related

companies, and prices are in line with market prices controlled by the

Excise Department.

Type and Extend of Related transactions

Sales	Dividend income	Interest Expense	Interest income	Cash Pooling	Other Expense
450,147	539,960	748	254	-	192

Unit: Thousand Baht

2. Thai Nonferrous Metal Company Limited

Descriptions of Relationship The Company holds 97.00 percent of fully paid-up and registered

capital. This juristic person includes one common director.

Type of Business Lead alloy and pure lead smelting

Pricing Policy The Company purchases lead alloy and pure lead from Thai

Nonferrous Metal Company Limited under regular business

conditions.

Type and Extent of Related transactions

Sales	Interest income	Other income	Purchase	Account Receivable	Account Payable	Cash Pooling
37	7,006	44,933	859,562	16,264	65,417	351,105

Unit: Thousand Baht

3. Power Plas Company Limited

Descriptions of Relationship The Company holds 100.00 percent of fully paid-up and registered

capital. This juristic person includes one common director.

Type of Business Manufacture and distribution of plastic casing for batteries.

Price Policy Related The Company purchases plastics, and sale plastic casing for batteries.

Type and Extent of Related transactions

Purchase	Other Income	Dividend income	Account Receivable	Account Payable	Cash Pooling	Interest
						Expenses
32,270	1,962	10,000	-	-	-	70

Unit: Thousand Baht



Transactions with related parties

Name	Transaction	Amount	Transfer price policy	Remark
		2019		
		(Baht)		
Hitachi Chemical Asia (Thailand) Co.,				Agree upon basis,
Ltd.	- Sale of goods	121,911,448	Market price	No contract
	- Commission income	6,931,162		Contract price
	- Other income	3,567,451		
				Agree upon basis,
Hitachi Chemical Co., Ltd.	- Purchase of raw material	1,527,899	Market price	No contract
				Agree upon basis,
	- Sale of goods	55,146	Market price	No contract
	- Other income	2,589,255		Advisor Fee
				Engineer&
	- Service fee	1,981,322		Training Fee
	- Brand sublicensing fee	45,816,003		Contract Brand fee
	- Royalty	3,705,043		Contract Royalty
				Contract Cash
				Pooling
	- Loan from cash pooling	656,616,907		Agreement
				Contract Cash
				Pooling
Hitachi Asia (Thailand) Co., Ltd.	- Interest income	-		Agreement
				Agree upon basis,
	- Service fee	11,943,755	Market price	No contract
				Contract Cash
				Pooling
	- Interest expense	16,960,868		Agreement
				Agree upon basis,
Hitachi Asia Co., Ltd.	- Service fee	4,340,467	Market price	No contract
		_		Agree upon basis,
Hitachi Kasei Shoji Co., Ltd.	- Purchase of raw material	7,881,688	Market price	No contract
Hitachi Chemical Asia-Pacific Pte.		_		Agree upon basis,
Ltd.	- Sale of goods	197,052,740	Market price	No contract



ANALYSIS AND DESCRIPTION OF MANAGEMENTS OVERALL BUSINESS OPERATION AND SIGNIFICANT CHANGE

In 2019, the restructuring of the Company business by transferring the entire business from Power Plas Co., Ltd. and 3K Products Co., Ltd., 99.99 percent of shares of which are held by the Company was implemented, for the purpose of cost reduction and optimizing the efficiency of supervision and internal control. The Company acquired all the assets and liabilities, rights, duties and obligations of Power Plastic Products Co., Ltd. and 3K Products Co., Ltd. on 1 April 2019. The Company increased traction battery capacity to 800 sets per month with an investment of approximately Baht 290 million.

In 2019, the domestic sales revenue of battery was decreased 4.32%, battery was imported from abroad and the domestic car industry was dropped by 7% and the trend continued decreasing from COVID-19 situation. It was resulted in more competitive price market in the country although decreased in raw material prices. As a result, the Company's total revenue for the year 2019 slightly decreased by approximately 5% compared to 2018. However, the market share of the Company was maintained and resulted in a slight decrease in total revenue.

In 2019, the Company made investment to improve factory and increased production capacity of lead alloy of Thai Nonferrous Metal Co., Ltd. by using an investment of approximately Baht 180 million. It is expected to increase revenue in 2020.

The price of lead in the London Metal Exchange (LME) has decreased. The price closed at US \$ 1,899 per metric ton and US \$ 1,965 per metric ton as of December 2019 and 2018, respectively.

Operation Performance and the Ability to Make Profit

The Company and its subsidiaries operate mainly as stated in the report of only a single duty which is a manufacturer and distributor of batteries and operate in a single geographic area, which is in Thailand. The Company evaluated performance of each segment based on profit or loss from the operations, which are measured using the same criteria used to measure the profit or loss of operations in the financial statements. Therefore, the revenues, earnings from operations and assets reflected in the financial statements are already reported as according to segment operations and geographic area.

Total Revenue

In the year 2019, the Company had sales revenue in the consolidated financial statements of Baht 4,799 million, a decreased of Baht 220 million compared to the year 2018 when the Company had revenue of Baht 5,019 million or a decrease of 4.38% due to the higher competition in international market.



Gross Profit Margin and Net Profit.

The Company's gross margin for the years 2019 and 2018 were 20.58% and 18.30% respectively and increased by 2.28%. The Company could reduce costs such as the raw material cost and the fixed production cost.

Selling and administrative expenses in 2019 amounted to Baht 892.15 million or 18.59% of the revenue from sales compared to 2018 which amounted to Baht 951.27 million or 18.95% of the revenue from sales. This was a decrease from the previous year with the amount of Baht 59.12 million because the Company could reduce fixed administrative expenses. However, the Company increased in sale promotion expenses.

In 2019 and 2018, the Company had tax and surcharge from tax assessment of Baht 0.30 million and Baht 2.90 million, respectively.

In 2019 and 2018, the Company recognized a product warranty expenses for products sold to a foreign customer and domestic Baht 8.66 million and Baht 178.69 million, respectively.

Asset Management Capability

Liquidating Asset

The ratio of the Company's current assets to total assets decreased by 47.32% in 2019, while the ratio in 2018 was at 47.95%, due to lower inventories.

On 31 December 2019 and 2018, the Company has the remaining balance of Baht 624 million and Baht 801 with Baht 177 million decreased. Most Company's raw materials are lead and battery's sheets, shells and lids. There is no limitation on raw material life, thus, there is no raw material expiration date. From the production process to finished products, the Company operates raw materials on the 'First-In- First-Out' (FIFO) method and will consider the reserve for expired products according to the life of stock inventory. Our policy is to reduce cost into the net receivable for the whole lot of remaining products with more than 1-year non-performing inventory which on 31 December 2019 and 2018 at Baht 14.49 million and Baht 15.36 million respectively.

In 2019, the Company's fixed asset and total asset ratio was 48.03% with 38.68% increase from that of 2018's. The total land, buildings and equipment on 31 December 2019 and 2018 was Baht 1,340.61 million and Baht 1,206.90 million respectively. There were also of real estate for investment and land in 2019 and 2018 worth Baht 126.50 million and Baht 136.88 million respectively. Considering the current real-estate market price, this land has gained more value.

In 2019 and 2018, the Company had the average collection period of 31.30 days and 32.99 days respectively, thus, 1.69 days.

The Company's total trade receivable on 31 December 2019 and 2018 were Baht 502.07 million and Baht 332.51 million respectively, with the three months or more overdue payment of Baht 361.16 million or 71.93% of trade receivable, however, in 2018 was Baht 296.60 million or 89.20% of account receivable.



In battery distribution and export, the Company will consider the ability to pay of each individual customer for example setting 30 days credit term of payment before delivering to new customers after the Bill of Landing dates, etc. For within the country transaction, the Company's policy is for customers to settle the invoice every 15 days. However, for selling other products, credit term is as normal business practice of 30-60 days.

For the reserve for non-performing account receivable, we mainly consider the evaluation of life of account receivable and debtor's payment history by reserving the whole amount of more than twelve months non-performing account receivable.

In 2019, the Company has decreased its provision for doubtful accounts of Baht 40.46 million to Baht 39.72 million.

Liquidity and capital adequacy of the Company

In 2019 and 2018, the Company has the remaining cash balance of Baht 223.34 million and Baht 251.18 million respectively, with Baht 27.84 million decreased. The Company's current ratio to current liabilities is 1.04 times. Compared to the previous year, the ratio was 0.94 times.

In conducting business, the Company will use working capital from operating activities, the cost of financing of which is low, to purchase property, plant and equipment and to repay loan. The Company and its subsidiaries have various credit facilities from financial institutions amounting to Baht 2,105 million and Baht 4,900 million, respectively, as unused credit facilities as at 31 December 2019 and 2018, respectively, to support the Company's business operations.

As of 31 December 2019, and 31 December 2018, the Company had a debt to equity ratio of 0.92: 1.13, respectively.

Factors which may impact the future operations

Important risk factors which may impact Company's future operations include the followings:

- 1. Market within Thailand and export market were decelerated because of the ongoing world economic downturn in 2019. Therefore, battery types of products are likely to also be affected as the supplies are greater than demands. However, the Company will try to retain the market share.
- 2. Trend of consumers has been turned to the ready-to-use type batteries with acid already added and power already charged in the manufacturer's plants and the batteries of this type have gained popularity. This increases the convenience of not having to worry about filling water frequently. The Company has production technology and production capacity enough to accommodate future growth with ready action plans and goals for the future.



The development guidelines and countermeasures taken by the Company to increase the efficiency of the organization are as follows:

- In 2019, the Company invested in new machinery to enhance the efficiency in production with less energy consumption and reduced workers. This investment will reduce production costs per unit to increase market competitiveness and compensate for future fluctuations in price of raw materials.
- The Company focuses on supporting and developing skills for labors to be flexible in order to adjust to economic environment changes.
- The Company uses production resource wisely to minimize the damage from production process.
- The Company designated the work group to work on reducing the risks in the current exchange rate and commodity prices.
- The Company has set up the rules as COVID-19 countermeasures, which restricts the travel abroad by executives and employees as well as visitors coming from abroad. The supervisors and executives must be aware of the employee's travel at all times during the situation has not been resolved.



Debt Obligations (Note for financial report no. 25).

Capital commitments

As at 31 December 2019 and 2018, the Group had capital commitments relating to the acquisition of machinery and equipment from unrelated parties as follows.

(Unit: Million)

	Consoli	dated	Sepa	rate
	financial st	atements	financial st	tatements
Currency	2019	2018	2019	2018
Baht	22	31	6	29
EUR	-	2	-	-
JPY	-	3	-	3

Obligations on Operating Leases and service commitments

The Group has entered into operating lease agreements in respect of the lease of land, building, warehouse and motor vehicle and service agreements. The terms of the agreements are generally between 1 and 5 years.

As at 31 December 2019 and 2018, the Group had future minimum lease and service payments required under these non-cancellable operation lease and service agreements as follows.

(Unit: Million Baht)

	Consoli	dated	Sepa	rate
	financial st	atements	financial s	tatements
Payable	2019	2018	2019	2018
In up to 1 year	24	26	21	5
In over 1 to up to 5 years	29	47	27	10

Guarantee

As at 31 December 2019 and 2018, there were outstanding bank guarantees issued by the banks on behalf of the Group as follows.

(Unit: Million Baht) Consolidated Separate financial statements financial statements Bank guarantees 2019 2018 2019 2018 5 5 Bank guarantee for performance bonds 11 11 Bank guarantee for electricity use 16 17 16 15



As at 31 December 2019, the Group has been granted various types of credit facilities, by several financial institutions of which Baht 2,105 million (2018: Baht 4,900 million), has not been utilised. Most of the facilities have been cross-guaranteed among the Group.

Brand sublicensing agreements

The Group entered into license agreements with Hitachi, Ltd., its ultimate parent company, to grant the right to use the trademark. The trademark can be used "Hitachi/HITACHI" on business documents, goods and/or services as well as representing to any third parties that the Group is affiliated with the Hitachi Group. The rate is as stipulated in the agreements. The agreements are effective for a period of 5 years and will be automatically renewed for further periods of one year unless terminated.

Technical assistance agreement

The Company has a technical assistance agreement with the parent company, Hitachi Chemical Company Limited, whereby the latter agrees to grant the rights and furnish certain technological know-how and assistance for the production of products specified in the agreement. Under the terms of the agreement, the Company is to pay technical assistance fee at the rate of 2.6% of the value of products sold. The agreement is effective for a period of 2 years and will be automatically renewed for further periods of one year unless terminated.

Tax liabilities of tax assessment

On 4 January 2013, the Company received the first assessment notice from the Customs Department which included 135 copies concerning assessments of customs duty, value added tax and surcharges on imports of raw materials and machineries during the years 2007 - 2010. According to the notices, the Company was called for underpayments of tax and was required to pay the customs duty and value added tax shortfall of Baht 9.92 million and Baht 89.57 million, respectively or a total of Baht 99.49 million together with the surcharges of Baht 60.12 million or in aggregate of Baht 159.61 million.

In making the preliminary review over the documentations, the Company found that the serial numbers and amounts stipulated in Import Declaration Forms specified in the Notices from the Customs Department did not match to the Company's record. In addition on 5 October 2010, the Customs Department, the authority conducting the investigation, informed the Company that its freight forwarders have forged the customs documents and receipts and provided fraudulent documents to the Company. The Company has requested the related documents and received 3 set of related documents from the Customs Department. Subsequently on 19 October 2010, the Company sued its freight forwarders including their authorised representatives. The Civil Court has ruled that there were sufficient on ground under the Criminal Code to accept the lawsuit against the freight forwarders together with their authorised representatives.

On 25 May 2016, the Company received the second assessment notice from the Customs Department which included 135 copies concerning assessments of customs duty, value added tax and surcharges on imports of

raw materials and machineries during the years 2007 - 2010 on the basis of which the officials did not include in the first assessment notice. According to the notices, the Company was called for underpayments of tax and was required to pay the shortfall and surcharges totaling of Baht 90.36 million.

To the best of its knowledge, the management believes that the Company has been made appropriate actions and has no intention to defraud to the government. The Company believes that the evidences showing the customs clearing and receipts from the Customs Department which contained the signature of custom officials were certified that the transactions were true and correct. Moreover the management believes that the tax assessment will not have the impact to the Company or otherwise not exceeding the shortfall of custom duty and value added tax of Baht 21.28 million (surcharges included). As a result, the Company has reserved the tax liability assessment of Baht 21 million in the 2016 financial statements.

Subsequently on 9 September 2017, the Company received the decision from the Appeal Committee of the Revenue Department dated 5 July 2017 regarding the appeal related to value added tax submitted by the Company dated 23 June 2016 and 19 September 2016. The decision was to rescind the additional tax assessment of Baht 90.36 million in accordance with the second tax assessment notice following the unlawful provisional tax assessment.

In addition, the decision also addressed the disputes under the first tax assessment notice which called for the shortfall and surcharges totaling of Baht 159.61 million. Based on the foundation of the truth and relevant law enforcement, the Company did not submit an appeal for the first tax assessment notice. Therefore the disputes arising from the tax assessment were resolved. As a result, in 2017, the management has recognised the tax liabilities in accordance with the first tax assessment notice amounting to Baht 159.61 million plus the surcharges of Baht 39.37 million, and in 2018, the Company recognised the additional surcharges of Baht 2.61 million or in aggregate of Baht 201.59 million. Subsequently on 25 October 2018, the Company made the payment of Baht 152.24 million for the value added tax and the surcharges to the Revenue Department according to the Notice of assessment No.1 from the Custom Department. On 18 March 2019, the Company made the remaining payment of Baht 49.65 million for the value added tax and surcharges and additional surcharge of Baht 0.30 million to the Revenue Department.

Provision and contingent liabilities for litigations

In 2018, the Group received civil lawsuit summons together with copies of complaints filed by its former employees. The former employees petitioned the Thai courts to order the Group to pay compensation amounting to Baht 181 million for alleged breaches of contract arising from the termination of their employment, together with pre and post judgment interest. Currently, the lawsuits are at the preliminary stage. However, the Group's management believes that the evidence it has will enable it to defend the case.



The Remuneration of the Auditor

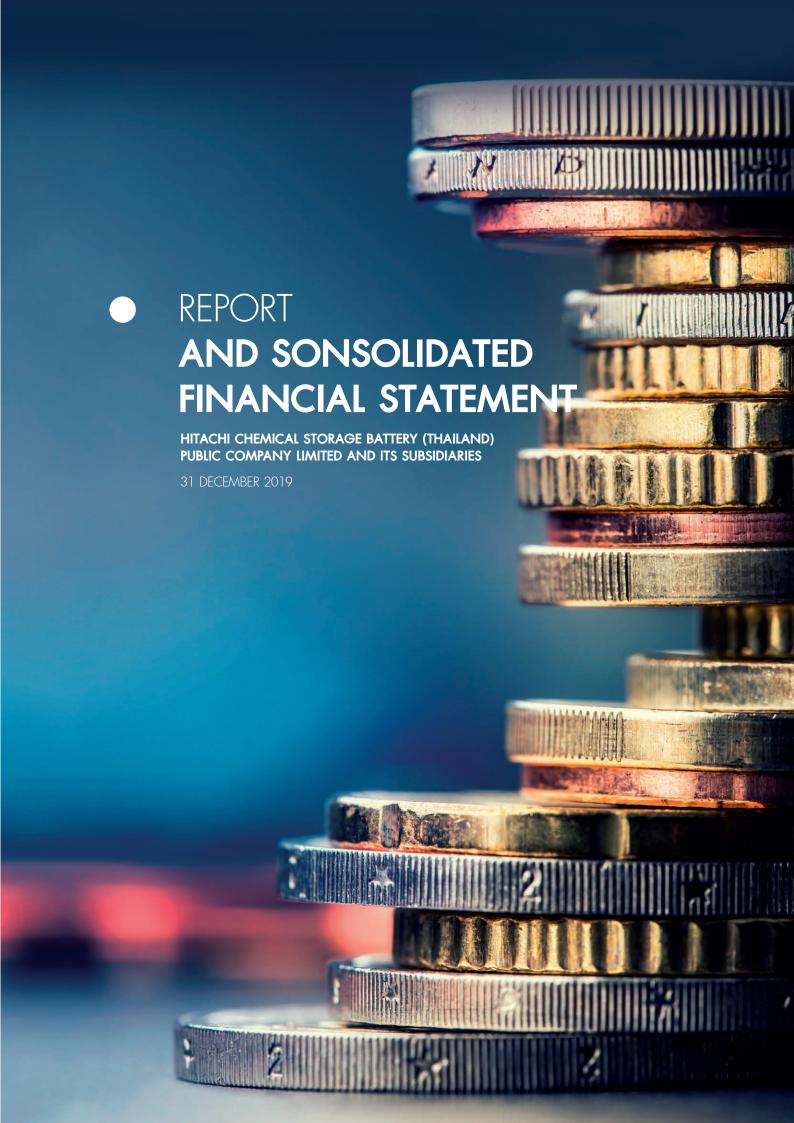
1) The Audit Remuneration

The Company and its subsidiaries had paid the amount of Baht 3.29 million to an audit company in which the auditors work for in the past fiscal year.

2) Other Non-audit Fee

The Company and its subsidiaries did not pay any of the other services provided by the auditors or the audit firm for which the auditors work including the agreement of incomplete services in the past fiscal year.





INDEPENDENT AUDITOR'S REPORT

Independent Auditor's Report

To the Shareholders of Hitachi Chemical Storage Battery (Thailand) Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Hitachi Chemical Storage Battery (Thailand) Public Company Limited and its subsidiaries ("the Group"), which comprise the consolidated statement of financial position as at 31 December 2019, and the related consolidated statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of Hitachi Chemical Storage Battery (Thailand) 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 Hitachi Chemical Storage Battery (Thailand) Public Company Limited and its subsidiaries and of Hitachi Chemical Storage Battery (Thailand) Public Company Limited as at 31 December 2019, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

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

Emphasis of Matter

I draw attention to note 25.7 to the financial statements regarding the former employees file lawsuit against the Group due to the termination of their employment. The outcome of the case is still uncertain. My opinion is not modified in respect of this matter.



Key Audit Matter

Key audit matter is those matters that, in my professional judgement, was of most significance in my audit of the financial statements of the current period. This matter was 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 this matter.

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 this matter. 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 matter below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matter and how audit procedures respond for the matter is described below.

Allowance for diminution in value of inventory

The Group had a significant net outstanding balance of inventory in manufacture and distribution of batteries as at 31 December 2019 amounting to Baht 624 million since prices of lead as raw material for batteries fluctuated in line with changing supply and demand in the global market, leading to effect on battery production costs. The Group was limited in its ability to increase the selling prices of batteries. As a result, estimating the net realisable value of inventory as disclosed in Note 9 to the financial statements requires detailed analysis of the product life cycle, the competitive environment, economic circumstances, situations within the industry and basis applied in estimating prices of batteries. 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. I also evaluated the method and the assumptions applied by the 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.
- Analysing the inventory holding periods and inventory movements to identify products with indicators of lower than normal inventory turnover.
- Comparing details of sales contract occurring after the date of the financial statements with the cost of inventory for each product line.



Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon. The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.



Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing an
 opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



Obtain sufficient appropriate audit evidence regarding the financial information of the entities
or business activities within the Group to express an opinion on the consolidated financial
statements. I am responsible for the direction, supervision and performance of the group
audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.

Vilailak Laohasrisakul

" ZW.

Certified Public Accountant (Thailand) No. 6140

EY Office Limited

Bangkok: 21 February 2020



STATEMENT OF FINANCIAL POSITION

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES AS AT 31 DECEMBER 2019

		Consolidated final	ncial statements	Separate financi	al statements
	Note	2019	2018	2019	2018
Assets					
Current assets					
Cash and cash equivalents	7	223,344,330	251,182,525	81,970,311	119,214,97
Trade and other receivables	6, 8	508,518,659	338,724,531	511,895,218	363,011,15
Short-term loans to related party	6	-	-	351,105,291	385,000,00
Inventories	9	623,722,786	801,331,229	535,339,151	537,405,92
input tax refundable		89,964,328	104,865,394	89,964,327	104,410,60
Total current assets	•	1,445,550,103	1,496,103,679	1,570,274,298	1,509,042,66
Non-current assets	•				
Investments in subsidiaries	10	-	-	304,411,224	315,164,44
Investment properties	11	126,494,646	136,878,204	126,494,646	98,723,44
Property, plant and equipment	12	1,340,605,378	1,206,895,829	1,030,860,322	887,657,66
Intangible assets	13	15,094,694	20,774,874	14,992,814	17,298,30
Deferred tax assets	19	114,052,692	150,256,829	80,204,166	78,647,42
Other non-current assets	14	12,951,916	109,529,593	12,931,916	103,436,07
Total non-current assets		1,609,199,326	1,624,335,329	1,569,895,088	1,500,927,36
Total assets		3,054,749,429	3,120,439,008	3,140,169,386	3,009,970,02





STATEMENT OF FINANCIAL POSITION (CONTINUED)

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES AS AT 31 DECEMBER 2019

					(Unit: Bah
	N-4-	Consolidated finar		Separate financi	
Liabilities and about baldout assitu	Note	2019	2018	2019	2018
Liabilities and shareholders' equity					
Current liabilities	6 15	E44 E20 724	400 220 240	F20 F22 020	442 402 076
Trade and other payables	6, 15	511,539,724	480,239,218	528,522,829	413,192,076
Short-term loans from related parties	6	656,616,907	827,468,358	656,616,907	1,238,873,186
Tax liabilities from tax assessment	25.6	-	49,649,376	-	49,649,376
Provision for product warranty	16	206,054,312	216,968,887	206,054,312	185,426,93
Income tax payable		11,715,069	13,313,798	11,715,069	
Total current liabilities		1,385,926,012	1,587,639,637	1,402,909,117	1,887,141,573
Non-current liabilities					
Provision for long-term employee benefits	17	79,804,305	66,094,079	71,501,506	35,077,89
Total non-current liabilities		79,804,305	66,094,079	71,501,506	35,077,89
Total liabilities		1,465,730,317	1,653,733,716	1,474,410,623	1,922,219,464
Shareholders' equity					
Share capital					
Registered					
20,000,000 ordinary shares of Baht 10 each		200,000,000	200,000,000	200,000,000	200,000,000
Issued and fully paid-up					
20,000,000 ordinary shares of Baht 10 each		200,000,000	200,000,000	200,000,000	200,000,000
Share premium		389,501,173	389,501,173	389,501,173	389,501,173
Dificit from changes in ownership interests					
in a subsidiary		(1,643,687)	(1,643,687)	-	
Retained earnings					
Appropriated - statutory reserve	20	20,000,000	20,000,000	20,000,000	20,000,000
Unappropriated		978,256,156	856,488,443	1,056,257,590	478,249,390
Equity attributable to owners of the Company	·	1,586,113,642	1,464,345,929	1,665,758,763	1,087,750,563
Non-controlling interests of the subsidiaries		2,905,470	2,359,363	-	
Total shareholders' equity		1,589,019,112	1,466,705,292	1,665,758,763	1,087,750,563
Total liabilities and shareholders' equity		3,054,749,429	3,120,439,008	3,140,169,386	3,009,970,027



STATEMENT OF COMPREHENSIVE INCOME

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

		Consolidated fina	ncial statements	Separate financ	ial statements
	Note	2019	2018	2019	2018
Revenues	-		_		
Revenue from contracts with customers		4,799,160,350	5,019,065,178	4,571,455,106	4,349,685,215
Other income					
Dividend income	10.1	-	-	549,959,496	13,239,007
Gain on exchange		-	18,584,367	-	18,584,367
Others		129,463,786	87,956,640	119,519,465	108,778,516
Total revenues		4,928,624,136	5,125,606,185	5,240,934,067	4,490,287,105
Expenses					
Cost of sales		3,811,272,710	4,100,595,943	3,788,127,282	3,916,699,064
Selling and distribution expenses		424,395,066	507,156,920	400,494,012	320,304,398
Administrative expenses		467,755,418	444,117,920	406,885,929	292,710,356
Product warranty expenses		8,655,058	178,688,582	8,655,058	134,653,564
Tax and surcharge from tax assessment		298,352	2,898,938	298,352	2,898,938
Loss on exchange		9,832,432	-	9,816,887	-
Total expenses		4,722,209,036	5,233,458,303	4,614,277,520	4,667,266,320
Profit (loss) before finance cost and					
income tax benefits (expenses)		206,415,100	(107,852,118)	626,656,547	(176,979,215)
Finance cost		(20,042,987)	(22,524,229)	(20,820,831)	(14,175,584)
Profit (loss) before income tax benefits (expenses)		186,372,113	(130,376,347)	605,835,716	(191,154,799)
Income tax benefits (expenses)	19	(49,162,067)	25,298,272	(12,698,136)	40,265,185
Profit (loss) for the year		137,210,046	(105,078,075)	593,137,580	(150,889,614)
Other comprehensive income:					
Other comprehensive income not to be reclassified to profit	t or loss				
in subsequent periods					
Actuarial loss - net of income tax		(4,855,722)		(5,129,380)	-
Other comprehensive income not to be reclassified to profit	t or loss				
in subsequent periods - net of income tax		(4,855,722)		(5,129,380)	-
Other comprehensive income for the year		(4,855,722)		(5,129,380)	-
Total comprehensive income for the year		132,354,324	(105,078,075)	588,008,200	(150,889,614)





STATEMENT OF COMPREHENSIVE INCOME (CONTINUED)

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

		Consolidated fina	ncial statements	Separate financ	ial statements
	Note	2019	2018	2019	2018
Profit attributable to:					
Equity holders of the Company		136,631,645	(104,857,867)	593,137,580	(150,889,614
Non-controlling interests of the subsidiaries		578,401	(220,208)		
		137,210,046	(105,078,075)		
Total comprehensive income attributable to:					
Equity holders of the Company		131,767,713	(104,857,867)	588,008,200	(150,889,614
Non-controlling interests of the subsidiaries		586,611	(220,208)	: :	
		132,354,324	(105,078,075)		
Basic earnings per share	22				
Profit (loss) attributable to equity holders of the Company		6.83	(5.24)	29.66	(7.54

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



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STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

				Consolidated fins	Consolidated financial statements			
		Equ	Equity attributable to the Company's shareholders	Company's sharehold	lers			
			Deficit from					
			changes in			Total equity	Equity attributable	
	Issued and		ownership	Retained	Retained eamings	attributable to	to non-controlling	Total
	fully paid-up		interest in	Appropriated		shareholders	interests of	shareholders'
	share capital	Share premium	a subsidiary	- statutory reserve	Unappropriated	of the Company	the subsidiaries	equity
Balance as at 1 January 2018	200,000,000	389,501,173	(1,643,687)	20,000,000	961,346,310	1,569,203,796	2,580,565	1,571,784,361
Loss for the year	•	ı	•	•	(104,857,867)	(104,857,867)	(220,208)	(105,078,075)
Other comprehensive income for the year	•	•	•		•	•	•	•
Total comprehensive income for the year		1	1	1	(104,857,867)	(104,857,867)	(220,208)	(105,078,075)
Subsidiary paid dividends								
to its non-controlling interests	•	ı	1	ı	•	•	(994)	(994)
Balance as at 31 December 2018	200,000,000	389,501,173	(1,643,687)	20,000,000	856,488,443	1,464,345,929	2,359,363	1,466,705,292
Balance as at 1 January 2019	200,000,000	389,501,173	(1,643,687)	20,000,000	856,488,443	1,464,345,929	2,359,363	1,466,705,292
Profit for the year	•	ı	•	•	136,631,645	136,631,645	578,401	137,210,046
Other comprehensive income for the year	•				(4,863,932)	(4,863,932)	8,210	(4,855,722)
Total comprehensive income for the year		1	1	1	131,767,713	131,767,713	586,611	132,354,324
Dividend paid (Note 18)	•	1	•	ı	(10,000,000)	(10,000,000)	1	(10,000,000)
Subsidiary paid dividends								
to its non-controlling interests	•	1	•	1	•	•	(40,504)	(40,504)
Balance as at 31 December 2019	200,000,000	389,501,173	(1,643,687)	20,000,000	978,256,156	1,586,113,642	2,905,470	1,589,019,112



STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

		Sep	Separate financial statements	ts	(Unit: Baht)
	Issued and		Retained earnings	earnings	Total
	fully paid-up		Appropriated		shareholders'
	share capital	Share premium	- statutory reserve	Unappropriated	equity
Balance as at 1 January 2018	200,000,000	389,501,173	20,000,000	629,139,004	1,238,640,177
Loss for the year	•	1	•	(150,889,614)	(150,889,614)
Other comprehensive income for the year	•	•	1	•	-
Total comprehensive income for the year	•	1	1	(150,889,614)	(150,889,614)
Transferred to retained earnings		1	•	•	•
Balance as at 31 December 2018	200,000,000	389,501,173	20,000,000	478,249,390	1,087,750,563
Balance as at 1 January 2019	200,000,000	389,501,173	20,000,000	478,249,390	1,087,750,563
Profit for the year	•		1	593,137,580	593,137,580
Other comprehensive income for the year	•	•	1	(5,129,380)	(5,129,380)
Total comprehensive income for the year	•	•	1	588,008,200	588,008,200
Dividend paid (Note 18)			1	(10,000,000)	(10,000,000)
Balance as at 31 December 2019	200,000,000	389,501,173	20,000,000	1,056,257,590	1,665,758,763



CASH FLOWS STATEMENT

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

Cash flows from operating activities Profit (loss) before tax	2019			Separate financial statements	
		2018	2019	2018	
Profit (loss) before tax		·	·		
	186,372,113	(130,376,347)	605,835,716	(191,154,799	
adjustments to reconcile profit (loss) before tax to					
net cash provided by (paid from) operating activities					
Depreciation and amortisation	185,980,224	179,667,965	167,635,372	146,878,508	
Bad debts	6,500,943	-	-	-	
Allowance for doubtful accounts (reversal)	(3,577,953)	14,030,181	24,243,868	14,238,166	
Impairment loss of assets	39,135,297	3,235,006	42,965,788	3,373,176	
Reduction of inventory to net realisable value (reversal)	(879,597)	(38,596,046)	1,949,959	(28,200,052	
Allowance for impairment loss on investment in a subsidiary	-	-	5,462,406	-	
Loss (gain) on disposal/write-off of property, plant and equipment	(41,634,468)	2,024,222	5,964,942	97,114	
Gain on disposal of investment property	(4,720,197)	(34,549,360)	(4,720,197)	(265,965	
Allowance for impairment loss on investment properties	350,183	-	350,183		
Write-off assets	-	836,937	-	571,121	
Loss on capital receipt from investment in a subsidiary	-	-	346,010		
Provision for product warranty	10,670,766	178,688,582	4,779,061	134,653,564	
Tax liabilities from tax assessment	298,352	2,898,938	298,352	2,898,938	
Reversal of provision for litigation	-	(4,246,000)	-		
Provision for long-term employee benefits	30,032,352	8,611,665	27,397,013	5,087,556	
Dividend income	-	-	(549,959,496)	(13,239,007	
Interest income	(1,806,930)	(2,534,601)	(7,553,224)	(1,066,622	
Interest expenses	20,042,987	21,891,582	20,820,831	12,247,410	
Profit from operating activities before changes in		-	-		
operating assets and liabilities	426,764,072	201,582,724	345,816,584	86,119,108	
Operating assets (increase) decrease					
Trade and other receivables	(170,773,049)	230,973,789	3,510,941	45,565,812	
Inventories	178,488,040	201,840,529	117,942,402	28,841,604	
Value added tax refundable	14,901,066	(88,055,956)	14,542,987	(91,694,712	
Other non-current assets	(34,862,348)	(523,405)	(36,417,997)	(221,515	
Operating liabilities increase (decrease)					
Trade and other payables	19,271,439	40,691,064	(205,427,365)	(22,544,451	
Cash flows from operating activities	433,789,220	586,508,745	239,967,552	46,065,846	
Cash paid for long-term employee benefits	(22,391,778)	(7,733,032)	(3,962,675)	(5,545,453	
Cash paid for product waranty	(21,585,340)	(12,493,066)	(13,982,783)	-	
Cash paid for litigation	-	(3,000,000)	-		
Cash paid for tax liabilities from tax assessment	(49,947,728)	(152,236,068)	(49,947,728)	(152,236,068	
Cash paid for interest expenses	(20,489,789)	(21,184,295)	(21,621,596)	(10,952,653	
Cash paid for income tax	(15,514,508)	(23,700,649)	(2,249,930)	(573,419	





CASH FLOWS STATEMENT (CONTINUED)

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

					(Unit: Baht
		Consolidated financial statements		Separate financial statements	
	Note	2019	2018	2019	2018
Cash flows from investing activities					
Decrease (increase) in short-term loans to a related party		-	-	33,894,709	(385,000,000)
Capital receipt from investment in a subsidiary	10.1	-	-	4,944,809	-
Proceed from sale of investment properties		14,510,000	203,827,000	14,510,000	2,339,000
Acquisitions of property, plant and equipment		(305,937,191)	(220,864,466)	(177,075,783)	(178,437,313)
Proceeds from sales of property, plant and equipment		140,042,954	1,745,389	1,012,918	524,394
Acquisition of intangible assets		(1,212,938)	(1,421,450)	(1,152,438)	(602,699
Dividend received		-	-	549,959,496	13,239,007
Cash received from interest income		1,791,852	2,526,927	7,682,952	449,489
Net cash flows from (used in) investing activities		(150,805,323)	(14,186,600)	433,776,663	(547,488,122)
Cash flows from financing activities				_	
Decrease in short-term loans from banks		-	(1,105,000,000)	-	(470,000,000
Increase (decrease) in short-term loans from related parties		(170,851,451)	827,468,358	(582,256,279)	1,238,873,186
Dividend paid		(10,000,000)	-	(10,000,000)	-
Dividend paid for non-controlling interests of subsidiaries		(41,498)	-	-	-
Net cash flows from (used in) financing activities		(180,892,949)	(277,531,642)	(592,256,279)	768,873,186
Net cashflows from business combination					
under common control	2.4	-	-	(26,967,892)	-
Net increase (decrease) in cash and cash equivalents		(27,838,195)	74,443,393	(37,244,668)	98,143,317
Cash and cash equivalents at beginning of year		251,182,525	176,739,132	119,214,979	21,071,662
Cash and cash equivalents at end of year		223,344,330	251,182,525	81,970,311	119,214,979
		-	-	-	-
Supplemental cash flows information					
Non-cash items consist of					
Increase (decrease) in accounts payable for purchases of as	ssets	12,719,649	2,384,444	(858,927)	2,311,924
Decrease (increase) in deposits for purchases of assets		93,367,000	(99,087,614)	93,885,400	99,087,614
Transfer assets under installation/other non-current assets					
to intangible assets		689,312	2,023,782	689,312	1,860,080
Dividend payable to non-controling interests of subsidiary		-	994	-	



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

HITACHI CHEMICAL STORAGE BATTERY (THAILAND) PUBLIC COMPANY LIMITED AND ITS SUBSIDIARIES FOR THE YEAR ENDED 31 DECEMBER 2019

1. General information

Hitachi Chemical Storage Battery (Thailand) Public Company Limited is a public company incorporated and domiciled in Thailand. Its major shareholders are Siam Maki Company Limited and Hitachi Chemical Company Limited, which were incorporated in Thailand and Japan, respectively. The Company is principally engaged in the manufacture and distribution of batteries. The registered office of the Company is at 387 Moo 4, Soi Patana 3, Bangpoo Industrial Estate, Sukhumvit Road, Praeksa Sub-district, Muang District, Samutprakarn.

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 Hitachi Chemical Storage Battery (Thailand) Public Company Limited ("the Company") and the following subsidiaries (hereinafter called as "the Group").

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2019	2018
			(%)	(%)
Held by the Company				
3K Products Company Limited*	Local distribution agency of batteries	Thailand	100	100
Thai Nonferrous Metal Company Limited	Manufacturer of lead alloy and pure lead	Thailand	97	97
Power Plas Company Limited*	Manufacturer and distribution of plastic casing for batteries	Thailand	100	100
3K Traction Battery Company Limited**	Sales, leasing of forklift batteries and fabrication of metal casing for forklift truck batteries	Thailand	-	100

^{*}Completed the dissolution process in the year 2019

 $^{^{\}star\star}$ Completed the liquidation process in the year 2019



- b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.
- c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.
- d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.
- e) Material balances and transactions between the Group has been eliminated from the consolidated financial statements.
- f) Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.
- 2.3 The separate financial statements present investments in subsidiaries under the cost method.
- 2.4 Business combination under common control
 - On 1 November 2018, the Extraordinary General Meeting of the Shareholders no.1/2018 approved a business restructuring plan, for which the Company acquired the entire business of two subsidiaries at net book value as at 31 March 2019. The entire business transfer was completed on 1 April 2019 as detailed below:
 - (a) Acquired the business of 3K Products Co., Ltd., which the Company received all assets, liabilities, rights, duties and obligations of that company.
 - (b) Acquired the business of Power Plas Co., Ltd., including operations under the promotional privileges granted by the Board of Investment, which the Company received all assets, liabilities, rights, duties and obligations of that company.



The Company recognised the above transaction by using the pooling of interest method of accounting for the combination carried out under common control. The Company recognised the assets and liabilities which were transferred at net book value without revaluation as detailed below.

(Unit: Thousand Baht)

	3K Products	Power Plas
	Co., Ltd.	Co., Ltd.
Cash and cash equivalents	88,601	18,611
Trade and other receivables	149,895	24,909
Inventories	111,459	6,366
Other current assets	-	97
Investment properties	38,152	-
Property, plant and equipment	5,405	41,685
Deferred tax assets	12,756	188
Other non-current assets	6,853	-
Trade and other payables	(285,165)	(24,249)
Provision for product warranty	(29,777)	-
Income tax payable	(25,029)	-
Provision for long-term employee benefits	(5,750)	(827)
Net book value as at transferred date	67,400	66,780

The financial statements for the year ended 31 December 2018 and the related statement of comprehensive income for the year ended 31 December 2018, which were comparative information, presented the separate financial statement of the Company prior to the business combination. The comparative financial statements are therefore presented as if the combination of the 3 entities had occurred at the beginning of the comparative period as detailed below.



(a) Statement of financial position as at 31 December 2018 as the combination of the 3 entities had occurred at the beginning of the comparative period.

(Unit: Thousand Baht) Assets Current assets Cash and cash equivalents 239,899 Trade and other receivables 326,046 Short-term loans to a related party 385,000 Inventories 613,603 Value added tax receivable 104,411 Total current assets 1,668,959 Non-current assets Investments in subsidiaries 234,922 Investment properties 136,878 Property, plant and equipment 1,022,690 Intangible assets 20,669 Deferred tax assets 98,126 109,471 Other non-current assets Total non-current assets 1,622,756 3,291,715 Total assets Liabilities and shareholders' equity Current liabilities Trade and other payables 508,581 Short-term loans from related parties 827,468 Tax liabilities from tax assessment 49,649 Provision for product warranty 216,969 Income tax payable 13,314 1,615,981 Total current liabilities Non-current liabilities Provision for long-term employee benefits 58,234 Total non-current liabilities 58,234



1,674,215

Total liabilities

(Unit: Thousand Baht)

	(Unit: Thousand Baht)
Shareholders' equity	
Share capital	
Registered	
20,000,000 ordinary shares of Baht 10 each	200,000
Issued and fully paid up	
20,000,000 ordinary shares of Baht 10 each	200,000
Share premium	389,501
Retained earnings	
Appropriated - statutory reserve	20,000
Unappropriated	1,007,999
Total shareholders' equity	1,617,500
Total liabilities and shareholders' equity	3,291,715
(b) Statement of comprehensive income for the year ended 31 combination of the 3 entities had occurred at the beginning of the	
Profit or loss:	,
Revenues	
Sales income	4,780,425
Other income	
Gain on exchange	18,584
Others	142,466
Total revenues	4,941,475
Expenses	
Cost of sales	3,950,812
Selling and distribution expenses	507,157
Administrative expenses	411,459
Provision for product warranty	178,689
Total expenses	5,048,117
Loss before finance cost and income tax benefits	(106,642)
Finance cost	(14,844)
Loss before income tax benefits	(121,486)
Income tax benefits	22,793
Loss for the year	(98,693)
Other comprehensive income for the year	-
Total comprehensive income for the year	(98,693)



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 (revised 2018) and new financial reporting standards and interpretations which are effective for fiscal periods 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 adoption of these financial reporting standards does not have any significant impact on the Group's financial statements. However, the new standard involves changes to key principles, which are summarised below:

TFRS 15 Revenue from Contracts with Customers

TFRS 15 supersedes the following accounting standards together with related interpretations.

Accounting Standards:

TAS 11 (revised 2017) Construction Contracts

TAS 18 (revised 2017) Revenue

Accounting Standard Interpretation:

TSIC 31 (revised 2017) Revenue - Barter Transactions Involving Advertising Services Financial Reporting Standard Interpretations:

TFRIC 13 (revised 2017) Customer Loyalty Programmes

TFRIC 15 (revised 2017) Agreements for the Construction of Real Estate

TFRIC 18 (revised 2017) Transfers of Assets from Customers

Entities are to apply this standard to all contracts with customers unless those contracts fall within the scope of other standards. The standard establishes a five-step model to account for revenue arising from contracts with customers, with revenue being recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model.

The Group adopted this financial reporting standard using the modified retrospective method of adoption of which the cumulative effect is recognised as an adjustment to the retained earnings as at 1 January 2019, and the comparative information was not restated and elect to apply the practical expedients with not restate completed contracts as at 1 January 2019 for which the entity has transferred all of the goods or services identified in accordance with the previous accounting policy.

This standard does not have any significant impact on the Group's financial statements.



(b) 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 expects the adoption of these accounting standards to result in the recognition of credit losses. The Group is to recognise an allowance for expected credit losses on its financial assets, and it is no longer necessary for a credit-impaired event to have occurred. The Group applies the simplified approach to consider impairment of trade receivables.

The management of the Group is currently evaluating the impact of these standards on 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 Group plans to adopt TFRS 16 using the modified retrospective method of adoption of which the cumulative effect is recognised as an adjustment to the retained earnings as at 1 January 2020, and the comparative information was not restated.

The management of the Group expects the effect of the adoption of this accounting standard to the statement of financial position as at 1 January 2020 to be to increase the Group's assets by approximately Baht 39.1 million (the Company only: approximately Baht 36.1 million) and the Group's liabilities by approximately Baht 40.4 million (the Company only: approximately Baht 37.3 million).

4. Significant accounting policies

4.1 Revenue recognition

Revenue from contracts with customers

The Group's contracts with customers generally include one performance obligation. Revenue from sale of goods is recognised when control of an asset is transferred to the customer, generally upon delivery of the goods. Revenue is measured at the amount of the consideration received or receivable, excluding value added tax, of goods supplied after deducting returns, discounts, allowances and price promotions to customers.

Some contracts with customers have performance benefits to customers on achievement of specified sales volume. The Group uses the most likely amount method in estimating the amount of variable consideration, and presented as net of revenue from contracts with customers.

Assurance-type warranty to customers are accounted as provision for product warranty.

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 accounts receivable

Trade accounts receivable 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.

4.4 Inventories

Finished goods and work in process are valued at the lower of average cost and net realisable value. The cost of inventories is measured using the standard cost method, which approximates actual cost and includes all production costs and attributable factory overheads.

Raw materials, spare parts and factory supplies are valued at the lower of average cost and net realisable value and are charged to production costs whenever consumed.

4.5 Investments in subsidiaries

Investments in subsidiaries are accounted for in the separate financial statements, are stated at cost net of allowance for impairment loss (if any).

4.6 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at cost less accumulated depreciation and allowance for loss on impairment (if any).

Depreciation of investment properties is calculated by reference to their costs on the straight-line basis over the following estimated useful lives.

Building 30 years

Condominium units 30 years

Depreciation of the investment properties is included in determining income.

No depreciation is provided on land.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.



4.7 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 are calculated by reference to their costs on the straight-line basis over the following estimated useful lives.

Buildings	30	years
Buildings improvements	5 and 20	years
Machinery and equipment	3 - 10	years
Furniture and office equipment	4 and 5	years
Vehicles	4 and 5	years

Depreciation is included in determining income.

No depreciation is provided on land and assets under construction and installation.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.8 Intangible assets and amortisation

Computer software is carried at cost less accumulated amortisation and allowance for loss on impairment of assets (if any).

Computer software with finite useful lives are amortised on a systematic basis over the economic useful life and tested for impairment whenever there is an indication that the computer software may be impaired. The amortisation period and the amortisation method of such computer software are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

The estimated useful lives of computer software are 10 years.

4.9 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Company, whether directly or indirectly, or which are under common control with the Company.

They also include associated companies, and individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors and officers with authority in the planning and direction of the Company's operations.



4.10 Long-term leases

Leases of property, plant or equipment which 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 the straight line basis over the lease term.

4.11 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency. Items of each entity included in the consolidated financial statements as measured using the functional currency of the 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 rate are included in determining income.

4.12 Impairment of assets

At the end of each reporting period, the Group performs annual 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.

An impairment loss is recognised in profit or loss.

4.13 Employee benefits

Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

Post-employment benefits

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 separate trust funds and the Group's contributions are recognised as expenses when incurred.



Defined benefit plans

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law. The Group treats these severance payment obligations as a defined benefit plan.

The obligations under the defined benefit plan are 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 recongised immediately in other comprehensive income.

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 costs

4.14 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

4.15 Income tax

Income tax expenses represent the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.



The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.16 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows.

- Level 1 Use of quoted market prices in an observable active market for such assets or liabilities
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly
- Level 3 Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.



5. Significant accounting 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 accounts for receivables

In determining an allowance for doubtful accounts for receivables, the management needs to exercise judgement and make estimates based upon consideration of, among other things, past collection history, the aging profile of outstanding debts and the prevailing economic conditions.

Allowance for diminution in value of inventory

In determining an allowance for diminution in value of inventory, the management makes judgement and estimates net realisable value of inventory based on the amount of the inventories are expected to realise. These estimates take into consideration fluctuations of selling price directly relating to events occurring after the end of the reporting period. Also, the management makes judgement and estimates the expected loss from obsolete and slow-moving inventories based upon aging profile of inventories and the prevailing economic condition.

Assurance-type warranty to customers

The management estimates the warranty expenses for product return and repair of which sales are incurred during the year and are under warranty policy. The estimation is based on past experience and the history of actual claim.

Post-employment benefits under defined benefit plans

The obligations under the defined benefit plan are 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.

Litigations

The Group has contingent liabilities as a result of litigations. The Group's management has used judgement to assess the results of the litigations and consider these provisions for the loss that may caused.



6. Related party transactions

During the years, 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		Separa	ate	
	financial sta	tements	financial sta	tements	Transfer pricing policy
	2019	2018	2019	2018	
Transactions with subsidiaries					
(eliminated from the consolidated finar	ncial statemen	ts)			
Sales of goods	-	-	450	1,800	Agree upon basis
Dividend income	-	-	550	13	As declared
Interest income	-	-	7	1	1.40% - 1.90% p.a.
					(2018: 1.65% - 1.90%
					p.a.)
Other income	-	-	45	55	Contract price
Utilities income	-	-	2	7	Contract price
Purchases of raw materials	-	-	892	928	Agree upon basis
Rental expenses	-	-	-	1	Contract price
Transactions with related parties					
Sales of goods	319	109	283	84	Agree upon basis
Commission income	7	9	7	9	Contract price
Interest income	-	1	-	-	1.65% - 1.68% p.a.
Other income	6	10	6	10	Contract price
Purchase of raw materials	9	34	9	34	Agree upon basis
Service fee	16	4	12	3	Agree upon basis
Brand sublicensing fee	46	49	43	43	Contract price
Technical assistance fee	4	-	4	-	Contract price
Interest expense	17	14	17	8	1.40% - 1.90% p.a.
					(2018: 1.65% - 1.68%
					p.a.)





The balances of the accounts between the Company and those related parties as at 31 December 2019 and 2018 are as follows.

		(Unit: Thousand Baht)							
Consolidated		Separate							
financial st	atements	financial statements							
2019	2018	2019	2018						
Trade and other receivables - related parties (Note 8)									
-	-	16,728	195,778						
55,500	26,846	52,561	21,413						
55,500	26,846	69,289	217,191						
Note 15)									
-	-	65,417	78,099						
49,550	46,375	49,200	41,835						
49,550	46,375	114,617	119,934						
	financial st 2019 s (Note 8) - 55,500 55,500 Note 15)	financial statements 2019 2018 s (Note 8) 55,500 26,846 55,500 26,846 Note 15) 49,550 46,375	Consolidated Sepa financial statements financial statements 2019 2018 2019 s (Note 8) 16,728 55,500 26,846 52,561 55,500 26,846 69,289 Note 15) 65,417 49,550 46,375 49,200						

Loan to related party and loans from related party

The balances of loans between the Company and those related parties as at 31 December 2019 and 2018, and the movement are as follows.

or becember 2010 and 2010,	and the movem	chi are as lone	, , , , , , , , , , , , , , , , , , ,					
			(U	nit: Thousand Baht)				
		Separate financial statements						
	Balance as at	Increase during	Decrease during	Balance as at				
Short-term loans to related party	31 December 2018	the year	the year	31 December 2019				
Subsidiary	385,000	706,000	(739,895)	351,105				
Total	385,000	706,000	(739,895)	351,105				
			(U	nit: Thousand Baht)				
		Consolidated fin	ancial statements					
	Balance as at	Increase during	Decrease during	Balance as at				
Short-term loans from related party	31 December 2018	the year	the year	31 December 2019				
Related company (common shareholder/								
director)	827,468	3,737,365	(3,908,216)	656,617				
Total	827,468	3,737,365	(3,908,216)	656,617				
			(U	nit: Thousand Baht)				
		Separate finar	ncial statements					
	Balance as at	Increase during	Decrease during	Balance as at				
Short-term loans from related party	31 December 2018	the year	the year	31 December 2019				
Subsidiaries	411,405	-	(411,405)	-				
Related company (common shareholder/								
director)	827,468	3,737,365	(3,908,216)	656,617				
Total	1,238,873	3,737,365	(4,319,621)	656,617				

Short-term loans to related party and short-term loans from related party are transactions under "Cash Management Agreement" between Hitachi Group and the bank. Cash management services are provided by the bank with an objective to centralise cash transactions of the companies in Hitachi Group and help manage their cash liquidity. Under the agreement, a related company is the agent and holds cash balances on behalf of the Hitachi group companies. The Group has entered into a "Cash Pooling Agreement" with that agent company.

The short-term loans to related party and the short-term loans from related party carry interest at the rates stipulated in the agreements.

Directors and management's benefits

During the years ended 31 December 2019 and 2018, the Group had employee benefit expenses payable to their directors and management as below.

			(Unit: Thousand Baht)			
	Consolid	dated	Separ	ate		
	financial sta	atements	financial statements			
	2019	2018	2019	2018		
Short-term employee benefits	61,525	67,273	56,957	54,661		
Post-employment benefits	3,432	768	3,108	479		
Total	64,957	68,041	60,065	55,140		

Guarantee obligations with related parties

The Company has outstanding guarantee obligations with its related parties, as described in Note 25.3 to the financial statements.

7. Cash and cash equivalents

			(Unit: Th	ousand Baht)	
	Consoli	dated	Sepa	rate	
	financial sta	atements	financial statements		
	2019	2018	2019	2018	
Cash	573	760	523	620	
Bank deposits	221,964	247,044	80,640	118,595	
Cheque on hand	807	3,379	807		
Total	223,344	251,183	81,970	119,215	

As at 31 December 2019, bank deposits in savings accounts and fixed deposits of the Group carried interest at the rates between 0.00% and 0.63% per annum (2018: between 0.05% and 1.00% per annum), the Company only: between 0.00% and 0.38% per annum (2018: between 0.13% and 0.38% per annum).



8. Trade and other receivables

	Consolidated financial statements		(Unit: The Separate f statem		
-	2019	2018	2019	2018	
<u>Trade receivables - related parties</u>					
Aged on the basis of due dates					
Not yet due	51,856	14,714	49,440	142,337	
Past due					
Up to 3 months	69	1,495	69	55,495	
Total trade receivables - related parties, net	51,925	16,209	49,509	197,832	
Trade receivables - unrelated parties					
Aged on the basis of due dates					
Not yet due	202,489	185,635	195,766	88,529	
Past due					
Up to 3 months	106,743	94,751	104,459	46,007	
3 - 6 months	15,083	5,738	15,083	3,132	
6 - 12 months	70,924	4,794	70,924	-	
Over 12 months	54,905	25,377	54,905	-	
Total	450,144	316,295	441,137	137,668	
Less: Allowance for doubtful accounts	(39,716)	(40,458)	(39,716)	(15,472)	
Total trade receivables - unrelated parties, net	410,428	275,837	401,422	122,196	
Total trade receivables - net	462,353	292,046	450,930	320,028	
Other receivables					
Advances - unrelated parties	1,562	936	1,562	922	
Prepaid expenses	25,195	20,372	24,891	18,319	
Others receivable - related parties	3,575	10,637	19,780	19,359	
Others receivable - unrelated parties	2,551	8,407	2,353	2,463	
Others	13,283	9,162	12,379	1,920	
Total	46,166	49,514	60,965	42,983	
Less: Allowance for doubtful accounts	<u>-</u>	(2,836)	<u>-</u>	-	
Total other receivables - net	46,166	46,678	60,965	42,983	
Total trade and other receivables - net	508,519	338,724	511,895	363,011	



9. Inventories

(Unit: Thousand Baht)

Consolidated	financial	etatemente
Consolidated	imanciai	Statements

	Reduce cost to							
	Co	ost	net realisa	ble value	Inventories - net			
	2019	2018	2019	2018	2019	2018		
Finished goods	188,011	293,055	(6,488)	(9,633)	181,523	283,422		
Work in process	185,651	193,708	-	(1,441)	185,651	192,267		
Raw materials	166,365	291,462	(4,088)	(2,044)	162,277	289,418		
Spare parts and factory								
supplies	47,770	32,125	(3,909)	(2,246)	43,861	29,879		
Goods in transit	50,411	6,345			50,411	6,345		
Total	638,208	816,695	(14,485)	(15,364)	623,723	801,331		

(Unit: Thousand Baht)

Separate financial statements

	Reduce cost to							
	Co	ost	net realisa	ble value	Inventories - net			
	2019	2018	2019	2018	2019	2018		
Finished goods	142,737	93,873	(6,206)	(3,831)	136,531	90,042		
Work in process	171,701	180,105	-	(102)	171,701	180,003		
Raw materials	136,288	237,891	(1,674)	(2,044)	134,614	235,847		
Spare parts and factory								
supplies	44,376	27,415	(2,294)	(2,246)	42,082	25,169		
Goods in transit	50,411	6,345			50,411	6,345		
Total	545,513	545,629	(10,174)	(8,223)	535,339	537,406		

During the current year, the Group reversed the write-down of cost of inventories by Baht 0.9 million, and reduced the amount of inventories recognised as expenses during the year (The Company only: the Company reduced cost of inventories by Baht 1.9 million, to reflect the net realisable value. This was included in cost of sales and administrative expenses) (2018: the Group reversed the write-down of cost of inventories by Baht 38.6 million, The Company only: Baht 28.2 million, and reduced the amount of inventories recognised as expenses during the year.



10. Investments in subsidiaries

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

							(Unit: Thous	and Baht)
			Shareholding				Dividend received	
Company	Paid-up capital		percentage		Cos	st	during the year	
	2019	2018	20	2018	2019	2018	2019	2018
	Million Baht	Million Baht	(%)	(%)				
3K Products Company Limited	8	8	100	100	8,000	8,000	539,959	13,239
Thai Nonferrous Metal Company Limited	250	250	97	97	229,632	229,632	-	-
Power Plas Company Limited	65	65	100	100	72,242	72,242	10,000	-
3K Traction Battery Company Limited	-	5	-	100		5,290	-	_
Total					309,874	315,164	549,959	13,239
Less: Allowance for impairment					(5,463)			
Net investment in subsidiaries					304,411	315,164		

In May 2019, 3K Traction Battery Co., Ltd. has been dissolved and the Company received the return of all capital invested approximately amounting to Baht 5 million.

On 14 June 2019, the Extraordinary General Meeting of the shareholders of 3K Products Co., Ltd. passed a resolution to close the company due to entire business transfer and completed its dissolution process with the Ministry of Commerce on 14 June 2019.

On 14 June 2019, the Extraordinary General Meeting of the shareholders of Power Plas Co., Ltd. passed a resolution to close the company due to entire business transfer and completed its dissolution process with the Ministry of Commerce on 14 June 2019.

10.2 Details of subsidiary that has material non-controlling interests

							(Un	it: Million Baht)
	Proportion of equity				Profit/loss a	llocated to	Dividend paid to	
	interest l	held by	•		3		non-controlling interests during the year	
Company	non-controllin	ng interests						
	2019	2018	2019	2018	2019	2018	2019	2018
	(%)	(%)						
Thai Nonferrous Metal Company								
Limited	3	3	2.9	2.4	0.6	0.2	-	-

10.3 Summarised financial information that based on amounts before inter-company elimination of subsidiary that has material non-controlling interests

Summarised information about financial position as at 31 December 2019 and 2018

(Unit: Million Baht)

Company	Curren	t assets	Non-curre	ent assets	Current	liabilities	Non-curre	nt liabilities
	2019	2018	2019	2018	2019	2018	2019	2018
Thai Nonferrous Metal	177	274	344	238	(416)	(425)	(8)	(8)
Company Limited								

Summarised information about comprehensive income for the years ended 31 December 2019 and 2018

(Unit: Million Baht)

					Other com	prehensive	Total com	prehensive
Company	Rev	renue	Profi	t/loss	inco	ome	inc	ome
	2019	2018	2019	2018	2019	2018	2019	2018
Thai Nonferrous Metal	1,051	1,094	19	6	-	-	19	6
Company Limited								

Summarised information about cash flows for the years ended 31 December 2019 and 2018

(Unit: Million Baht)

							•	,
	Cash flo	ows from	Cash flo	ows from	Cash flo	ows from	Net Decre	ase in cash
Company	operating	activities	investing	activities	financing	activities	and cash	equivalents
	2019	2018	2019	2018	2019	2018	2019	2018
Thai Nonferrous Metal	160	131	(124)	(35)	(41)	(100)	(5)	(4)
Company Limited								

11. Investment properties

The net book value of investment properties as at 31 December 2019 and 2018 is presented below.

(Unit: Thousand Baht)

	Co	nsolidated fina	ncial statemer	nts	Separate	e financial stat	ements
		(Condominium		(Condominium	
	Land	Building	units	Total	Land	units	Total
31 December 2019:							
Cost	124,699	-	7,400	132,099	124,699	7,400	132,099
Less: Accumulated depreciation	-	-	(5,254)	(5,254)	-	(5,254)	(5,254)
Less: Allowance for loss							
on impairment	(350)			(350)	(350)		(350)
Net book value	124,349		2,146	126,495	124,349	2,146	126,495
31 December 2018:							
Cost	135,962	1,047	10,325	147,334	94,371	10,325	104,696
Less: Accumulated depreciation	-	(23)	(5,973)	(5,996)	-	(5,973)	(5,973)
Less: Allowance for loss							
on impairment	(3,793)	(667)		(4,460)			
Net book value	132,169	357	4,352	136,878	94,371	4,352	98,723



A reconciliation of the net book value of investment properties for the years 2019 and 2018 is presented below.

			(Unit: Tho	usand Baht)
	Consol	idated	Sepa	rate
	financial s	tatements	financial st	atements
	2019	2018	2019	2018
Net book value at beginning of year	136,878	306,502	98,723	101,131
Disposals - net book value	(9,790)	(169,278)	(9,790)	(2,073)
Depreciation charged	(243)	(346)	(240)	(335)
Allowance for loss on impairment	(350)	-	(350)	-
Increase from business combination				
under common control	_		38,152	
Net book value at end of year	126,495	136,878	126,495	98,723

The fair value of the investment properties as at 31 December 2019 and 2018 stated below:

			(Unit: The	ousand Baht)
	Consoli	dated	Sepa	rate
	financial st	atements	financial st	atements
	2019	2018	2019	2018
Land	298,570	294,330	298,570	229,410
Building	-	380	-	-
Condominium units	11,050	11,495	11,050	11,495

The fair value of the above investment properties has been determined based on market price with reference to trading information of nearby land and condominium units, which coincided with the appraisal, performed by an accredited independent valuer.

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(Unit: Thousand Baht)

			Consoli	Consolidated financial statements	ments		
		Building and		Furniture and		Assets under	
		building	Machinery and	office		construction and	
	Land	improvements	equipment	equipment	Vehicles	installation	Total
Cost							
1 January 2018	310,408	763,900	2,288,360	185,052	29,245	61,819	3,638,784
Acquisitions	•	1,572	6,521	8,712	104	107,253	124,162
Disposals/write-off	ı	(7,046)	(66,649)	(3,159)	(6,219)	1	(83,073)
Transfer to intangible assets	ı	ı	ı	1	ı	(1,860)	(1,860)
Transfer in (out)	1	2,582	10,348	5,415	ı	(18,345)	1
Adjustments	1	1	4	98	1	(247)	(157)
31 December 2018	310,408	761,008	2,238,584	196,106	23,130	148,620	3,677,856
Acquisitions	•	224	3,697	2,995	31	405,077	412,024
Disposals/write-off	(60,894)	(66,846)	(259,634)	(94,379)	(3,848)	1	(485,601)
Transfer to intangible assets	1	1	1	1	ı	(689)	(689)
Transfer in (out)	1	20,109	191,106	5,811	ı	(217,026)	1
Adjustments	1	1	1	1	1	(917)	(917)
31 December 2019	249,514	714,495	2,173,753	110,533	19,313	335,065	3,602,673

(Unit: Thousand Baht)

			Consolic	Consolidated financial statements	ements		
		Building and		Furniture and		Assets under	
		building	Machinery and	office		construction and	
•	Land	improvements	equipment	equipment	Vehicles	installation	Total
Accumulated depreciation							
1 January 2018	ı	427,687	1,752,456	161,669	27,109	ı	2,368,921
Depreciation for the year	ı	21,409	139,675	11,964	1,092	ı	174,140
Depreciation on disposals/write-off	ı	(4,978)	(65,056)	(3,055)	(6,214)	ı	(79,303)
Adjustments	'	1	(34)	35	1	1	_
31 December 2018	•	444,118	1,827,041	170,613	21,987	ı	2,463,759
Depreciation for the year	ı	20,238	148,253	11,609	481	ı	180,581
Depreciation on disposals/write-off	1	(42,395)	(250,319)	(92,997)	(3,792)	1	(389,503)
31 December 2019	1	421,961	1,724,975	89,225	18,676	1	2,254,837
Allowance for impairment loss							
1 January 2018	•	1	3,959	10		ı	3,969
Increase	1	1,201	1,868	156	7	1	3,232
31 December 2018	•	1,201	5,827	166	7	ı	7,201
Increase	ı	29	7,012	44	116	ı	7,231
Reversal due to write-off assets	1	(1,201)	(5,827)	(166)	(7)	1	(7,201)
31 December 2019	1	29	7,012	44	116	1	7,231
Net book value							
31 December 2018	310,408	315,689	405,716	25,327	1,136	148,620	1,206,896
31 December 2019	249,514	292,475	441,766	21,264	521	335,065	1,340,605

Depreciation for the year

2018 (Baht 158 million included in manufacturing cost, and the balance in administrative expenses)

174,140 180,581

2019 (Baht 167 million included in manufacturing cost, and the balance in administrative expenses)

(Unit: Thousand Baht)

Separate financial statements

			500		9		
		Building and		Furniture and		Assets under	
		building	Machinery	office		construction and	
	Land	improvements	and equipment	equipment	Vehicles	installation	Total
Cost							
1 January 2018	201,085	568,790	1,883,126	153,851	15,725	60,788	2,883,365
Acquisitions	ı	1,425	3,583	4,879	105	71,670	81,662
Disposals/write-off	ı	ı	(8,220)	(794)	(2,041)	•	(11,055)
Transfer to intangible assets	ı	1	1	ı	1	(1,860)	(1,860)
Transfer in (out)	,	1,817	10,348	5,415	-	(17,580)	1
31 December 2018	201,085	572,032	1,888,837	163,351	13,789	113,018	2,952,112
Acquisitions	ı	1	2,722	2,312	30	265,038	270,102
Disposals/write-off	ı	(3,647)	(230,208)	(89,578)	(3,773)	1	(327,206)
Transfer to intangible assets	ı	1	1	ı	1	(689)	(689)
Transfer in (out)	ı	20,109	193,888	3,029	1	(217,026)	1
Increase from business combination under							
common control	ı	784	129,527	23,882	2,041	1	156,234
31 December 2019	1	1	1	1	1	(712)	(712)
Accumulated depreciation	201,085	589,278	1,984,766	102,996	12,087	159,629	3,049,841
1 January 2018	ı	330,342	1,450,059	134,899	14,181	1	1,929,481
Depreciation for the year	ı	15,474	116,272	9,386	902	1	142,037
Depreciation on disposals/write-off	1	1	(7,599)	(794)	(2,042)	' 	(10,435)
31 December 2018	ı	345,816	1,558,732	143,491	13,044	1	2,061,083
Depreciation for the year	ı	15,618	135,772	10,606	469	1	162,465
Depreciation on disposals/write-off	ı	(2,269)	(226,446)	(88,490)	(3,737)	1	(320,942)
Increase from business combination under							
common control	1	253	89,423	17,793	1,675		109,144
31 December 2019	ı	359,418	1,557,481	83,400	11,451	'	2,011,750



(Unit: Thousand Baht)

			Separ	Separate financial statements	nents		
		Building and		Furniture and		Assets under	
		puilding	Machinery	office		construction and	
	Land	improvements	and equipment	equipment	Vehicles	installation	Total
Allowance for impairment loss							
1 January 2018	•	1	1	1	•	1	ı
Increase	•	1,201	1,997	166	7	1	3,371
31 December 2018	•	1,201	1,997	166	7	,	3,371
Increase	1	59	7,012	44	116	1	7,231
Reversal due to write-off assets	•	(1,201)	(1,997)	(166)	(7)	1	(3,371)
31 December 2019	'	59	7,012	44	116	'	7,231
Net book value							
31 December 2018	201,085	225,015	328,108	19,694	738	113,018	887,658
31 December 2019	201,085	229,801	420,273	19,552	520	159,629	1,030,860
Depreciation for the year							

2018 (Baht 131 million included in manufacturing cost, and the balance in administrative expenses) 2019 (Baht 151 million included in manufacturing cost, and the balance in administrative expenses)

142,037 162,465



As at 31 December 2019, certain building, machinery and equipment items of the Group have been 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 892 million (2018: Baht 1,206 million), the Company only: Baht 763 million (2018: Baht 1,033 million).

13. Intangible assets

The net book value of intangible assets as at 31 December 2019 and 2018 is presented below.

		(Unit: Thousand Baht)
	Consolidated	Separate
	financial statements	financial statements
Computer software		
31 December 2019:		
Cost	55,749	54,397
Less: Accumulated amortisation	(39,619)	(38,369)
<u>Less</u> : Allowance for diminution in value	(1,035)	(1,035)
Net book value	15,095	14,993
31 December 2018:		
Cost	67,580	56,403
Less: Accumulated amortisation	(46,802)	(39,102)
Less: Allowance for diminution in value	(3)	(3)
Net book value	20,775	17,298

A reconciliation of the net book value of intangible assets for the years 2019 and 2018 is presented below.

			(Unit: Thou	usand Baht)		
	Consoli	dated	Sepa	Separate		
	financial st	tatements	financial st	atements		
	2019	2018	2019	2018		
Net book value at beginning of year	20,775	22,514	17,298	19,346		
Acquisition of computer software	1,213	1,422	1,153	602		
Write-off	(1,395)	-	(3)	-		
Amortisation	(5,156)	(5,181)	(4,930)	(4,507)		
Allowance for impairment loss	(1,031)	(3)	(1,031)	(3)		
Transfers	689	2,023	689	1,860		
Increase from business combination						
under common control			1,817			
Net book value at end of year	15,095	20,775	14,993	17,298		



14. Other non-current assets

(Unit: Thousand Baht) Consolidated Separate financial statements financial statements 2019 2018 2019 2018 Export tax subsidy receivable 4,643 3,376 4,643 3,376 Deferred expenses 1,873 3,384 1,873 **Deposits** 2,650 Advance payment for fixed assets 5,202 99,088 5,202 99,088 Others 1,234 1,032 1,214 972 Total 12,952 109,530 12,932 103,436

During the current year, the Company identified accounting differences of Baht 38 million in a subsidiary's account, made fact-finding inquiries from relevant persons and filed a police report of this matter, which is currently under police investigation. Therefore, the Company transferred the balance and recorded as other non-current assets to be settled according to legal judgement. However, to proceed with caution, the Company set aside full provision for losses and recorded as expenses for the current year.

15. Trade and other payables

(Unit: Thousand Baht) Consolidated financial Separate financial statements statements 2019 2018 2019 2018 Trade and other payables - related parties 48,930 46,375 113,997 119,934 224,782 230,586 Trade and other payables - unrelated parties 212,168 191,814 Payables for purchase of assets - related parties 620 620 Payables for purchase of assets -20,719 8,620 6,619 8,097 unrelated parties Accrued sales incentives 41,830 51.295 41.830 Advance received from customers 7,223 12,693 7,223 12,693 21,062 Excise tax payable 15,410 21,062 15,410 Accrued expenses 133,050 110,678 112,137 67,492 Others 7,854 10,052 7,397 3,222 Total 511,540 480,239 528,523 413,192



16. Provision for product warranty

(Unit: Thousand Baht) Consolidated Separate financial statements financial statements 2019 2018 2019 2018 At beginning of year 216,969 50,773 185,427 50,773 Increase during the year 10,671 178,689 4,779 134,654 Utilisation (21,586)(12,493)(13,929)Increase from business combination 29,777 under common control At end of year 206,054 216,969 206,054 185,427

The Group recognises a provision for expected warranty claims on products sold and are under warranty policy. In addition, the Company recognised liabilities related to product warranty for products sold to a foreign customer as follows.

In December 2016, the Company received a claim from a foreign customer for the product damages under warranty policy approximately EUR 28.50 million regarding the goods sold during the years 2013 - 2016. In 2018, the Company received a debit note issued for such claim amounting to EUR 13 million. The management of the Company has been negotiating to the customer and the Company has requested necessary information from its customer to investigate the cause of such damages whether they were caused by the production process of the Company. However, the management determines that the product claim is depend on the outcome of negotiations and investigation in the future. In this respect, the management has estimated the provision for product claim under this matter of Baht 185 million and expects that claim would not exceed the provision reserved.



17. Provision for long-term employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, 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 year	66,094	65,215	35,078	35,536
Included in profit or loss:				
Current service cost	5,453	7,213	3,981	4,374
Interest cost	1,021	1,399	884	713
Past service cost	14,778	-	13,752	-
Past service cost of transferred employees from business				
combination under common control	8,780	-	8,780	-
Included in other comprehensive income:				
Actuarial loss arising from				
Demographic assumptions changes	25	-	(2)	-
Financial assumptions changes	4,147	-	3,766	-
Experience adjustments	1,898	-	2,648	-
Increase from business combination under common control	-	-	6,577	-
Benefits paid during the year	(22,392)	(7,733)	(3,962)	(5,545)
Provision for long-term employee benefits at end of year	79,804	66,094	71,502	35,078

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 has additional long-term employee benefit liabilities from this change. The Group reflected the effect of the change by recognised past service costs as expenses in the profit or loss in the current period.



The Group expects to pay Baht 9.7 million of long-term employee benefits during the next year (2018: Baht 2.1 million), the Company only: Baht 8.4 million (2018: Baht 1.9 million).

As at 31 December 2019 and 2018, the weighted average duration of the liabilities for long-term employee benefits is 6 - 7 years (the Company only: 6 years).

Significant actuarial assumptions are summarised below:

(Unit: % per annum)

	Consolidated fina	Consolidated financial statements		ncial statements
	2019	2018	2019	2018
Discount rate	1.3 - 1.4	2.1 - 2.6	1.3	2.1
Salary increase rate	3.0 - 5.0	3.0 - 6.5	4.0 - 5.0	4.0 - 5.0

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2019 and 2018 are summarised below:

(Unit: Million Baht)

	Consolidated fin	ancial statements	Separate finar	ncial statements
	Increase 0.5%	Decrease 0.5%	Increase 0.5%	Decrease 0.5%
Discount rate	(2.5)	2.7	(2.2)	2.3
Salary increase rate	2.6	(2.4)	2.3	(2.2)

(Unit: Million Baht)

As at 31 December 2018

	Consolidated fin	ancial statements	Separate financial statements		
	Increase 0.5%	Decrease 0.5%	Increase 0.5%	Decrease 0.5%	
Discount rate	(2.1)	2.2	(1.1)	1.2	
Salary increase rate	2.5	(2.4)	1.3	(1.3)	



18. Dividend paid

			Dividend	Dividend
Dividend	Approved by	No. of shares	per share	paid
		(Thousand shares)	(Baht)	(Thousand Baht)
Final dividend for 2018	The Annual General Meeting of			
	shareholders on 25 April 2019	20,000	0.5	10,000
Total for 2019				10,000

19. Income tax

Income tax expenses (benefits) for the years ended 31 December 2019 and 2018 are made up as follows.

			(Unit: Thou	usand Baht)		
	Consol	Consolidated		Separate		
	financial st	tatements	financial statements			
	2019	2018	2019	2018		
Current income tax:						
Current income tax charge	11,715	25,095	-	-		
Adjustment in respect of income tax						
of previous year	-	212	-	-		
Deferred tax:						
Relating to origination and reversal						
of temporary differences	37,447	(50,605)	12,698	(40,265)		
Income tax expenses (benefits)						
reported in the statement of						
comprehensive income	49,162	(25,298)	12,698	(40,265)		

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2019 and 2018 are as follows.

			(Unit: Tho	usand Baht)
	Consolidated financial statements		Separate	
			financial statements	
	2019	2018	2019	2018
Deferred tax on actuarial loss	1,243	_	1,311	



The reconciliation between accounting profit (loss) and income tax benefits is shown below.

			(Unit: Tho	usand Baht)
	Consolidated		Separate	
	financial st	atements	financial statemen	
	2019	2018	2019	2018
Accounting profit (loss) before tax	186,372	(130,376)	605,836	(191,155)
Applicable tax rate	20%	20%	20%	20%
Accounting profit (loss) before tax multiplied				
by income tax rate	37,274	(26,075)	121,167	(38,231)
Adjustment in respect of income tax				
of previous year	-	212	-	-
Effects of:				
- Dividend income	-	-	(109,992)	(2,648)
- Non-deductible expenses and eliminations	9,691	2,995	5,112	2,849
- Additional expense deductions allowed	(2,827)	(2,327)	(2,796)	(2,327)
- Others	5,024	(103)	(793)	92
Income tax expenses (benefits) reported in				
the statement of comprehensive income	49,162	(25,298)	12,698	(40,265)

A reconciliation of deferred tax assets and deferred tax liabilities are presented below.

	Consolidated	Separate
	financial statements	financial statements
As at 1 January 2019	150,257	78,647
Increase from business combination under common control	-	12,944
Recognised in comprehensive income during		
the year	(37,447)	(12,698)
Receognised in other comprehensive income during		
the year	1,243	1,311
As at 31 December 2019	114,053	80,204



The components of deferred tax assets and deferred tax liabilities as at 31 December 2019 and 2018 are as follows.

(Unit: Thousand Baht)

	Statement of financial position			
	Consolidated		Sepa	ırate
	financial s	tatements	financial st	atements
	2019	2018	2019	2018
Deferred tax assets				
Allowance for doubtful accounts	15,557	8,540	15,557	3,094
Allowance for diminution in value of inventories	2,346	7,802	2,035	1,645
Allowance for asset impairment	2,816	2,451	2,816	674
Provision for product warranty	41,211	43,394	41,211	37,086
Provision for long-term employee benefits	15,961	13,219	14,300	7,015
Unused tax losses	41,525	81,795	6,686	31,346
Total	119,416	157,201	82,605	80,860
Deferred tax liabilities				
Accumulated depreciation - building and equipment	5,363	6,944	2,401	2,213
Total	5,363	6,944	2,401	2,213
Net	114,053	150,257	80,204	78,647

The unused tax losses of the Group totaling of Baht 208 million will expire by 2029.

20. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5% of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10% of the registered capital. The statutory reserve is not available for dividend distribution. At present, the statutory reserve has fully been set aside.



21. Expenses by nature

Significant expenses classified by nature are as follows.

(Unit: Thousand Baht) Consolidated Separate financial statements financial statements 2019 2018 2019 2018 Salaries, wages and other employee benefits 558.229 549.525 500.075 389.638 Depreciation and amortisation 184,768 179,668 167,634 146,879 Sales promotion expenses 74,950 121,854 69,594 6,680 216.793 214,372 216,793 214,372 Excise tax expenses Repair and maintenance expenses 83,133 75,024 75,169 62,019 Electricity expenses 167,659 158,695 158,941 143,871 60,260 30.666 Shipping expenses 65,730 51,841 Rental expenses 15,735 27,798 6,539 3,288 Tax and surcharge from tax assessment 298 2,899 298 2,899 Raw materials and consumables used and purchase of finished goods 3,955,583 4,150,400 3,062,723 3,206,011 Changes in inventories of finished goods

22. Earnings per share

and work in process

Basic earnings per share is calculated by dividing profit (loss) for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares issue during the year.

(87,947)

67,271

117

22,278

23. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance. The chief operating decision maker has been identified as Chief Executive Officer.

The Group is principally engaged in the manufacture and distribution of batteries. Its operations are carried on only in Thailand. Segment performance is measured based on operating profit or loss, on a basis consistent with that used to measure operating profit or loss in the financial statements. As a result, all of the revenues, operating profits and assets as reflected in these financial statements pertain exclusively to the aforementioned reportable operating segment and geographical area.



The Group's geographical segment information based on location of customers for the years ended 31 December 2019 and 2018 were as follows:

(Unit: Million Baht)

	Revenue		
	2019 2018		
Thailand	2,468	2,892	
Other countries	2,331	2,127	
Total	4,799	5,019	

For the year 2019, the Group has no major customer with revenue of 10 percent or more of an entity's revenues (2018: Baht 645 million derived from one major customer).

24. Provident fund

The Company and certain subsidiaries and their employees have jointly established provident funds in accordance with the Provident Fund Act B.E. 2530. Both employees and the Company and certain subsidiaries contribute to the funds monthly at rates of 2% - 5% of basic salary. The funds, which is managed by UOB Asset Management (Thailand) Company Limited and TMB Asset Management Company Limited, will be paid to employees upon termination in accordance with the fund rules. The contributions for the year 2019 amounting to Baht 6 million (2018: Baht 6 million), the Company only: Baht 5 million (2018: Baht 4 million) were recognised as expenses.

25. Commitments and contingent liabilities

25.1 Capital commitments

As at 31 December 2019 and 2018, the Group had capital commitments relating to the acquisition of machinery and equipment from unrelated parties as follows.

(Unit: Million)

	Consoli	idated	Separate		
	financial st	atements	financial statemen		
Currency	2019 2018		2019	2018	
Baht	22	31	6	29	
EUR	-	2	-	-	
JPY	-	3	-	3	



25.2 Operating leases and service commitments

The Group has entered into operating lease agreements in respect of the lease of land, building, warehouse and motor vehicle and service agreements. The terms of the agreements are generally between 1 and 5 years.

As at 31 December 2019 and 2018, the Group had future minimum lease and service payments required under these non-cancellable operation lease and service agreements as follows.

(Unit: Million Baht)

	Consoli	idated	Separate		
_	financial st	atements	financial statements		
Payable	2019 2018		2019	2018	
In up to 1 year	24	26	21	5	
In over 1 to up to 5 years	29	47	27	10	

25.3 Guarantees

As at 31 December 2019 and 2018, there were outstanding bank guarantees issued by the banks on behalf of the Group as follows.

(Unit: Million Baht)

	Consolidated		Separate	
<u>-</u>	financial s	tatements	financial st	atements
Bank guarantees	2019	2018	2019	2018
Bank guarantee for performance bonds	5	11	5	11
Bank guarantee for electricity use	16	17	16	15

As at 31 December 2019, the Group has been granted various types of credit facilities, by several financial institutions of which Baht 2,105 million (2018: Baht 4,900 million), has not been utilised. Most of the facilities have been cross-guaranteed among the Group.

25.4 Brand sublicensing agreements

The Group entered into license agreements with Hitachi Ltd., its ultimate parent company, to grant the right to use the trademark. The trademark can be used "Hitachi/HITACHI" on business documents, goods and/or services as well as representing to any third parties that the Group is affiliated with the Hitachi Group. The rate is as stipulated in the agreements. The agreements are effective for a period of 5 years and will be automatically renewed for further periods of one year unless terminated.



25.5 Technical assistance agreement

The Company has a technical assistance agreement with the parent company, Hitachi Chemical Company Limited, whereby the latter agrees to grant the rights and furnish certain technological know-how and assistance for the production of products specified in the agreement. Under the terms of the agreement, the Company is to pay technical assistance fee at the rate of 2.6% of the value of products sold. The agreement is effective for a period of 2 years and will be automatically renewed for further periods of one year unless terminated.

25.6 Tax liabilities of tax assessment

On 4 January 2013, the Company received the first assessment notice from the Customs Department which included 135 copies concerning assessments of customs duty, value added tax and surcharges on imports of raw materials and machineries during the years 2007 - 2010. According to the notices, the Company was called for underpayments of tax and was required to pay the customs duty and value added tax shortfall of Baht 9.92 million and Baht 89.57 million, respectively or a total of Baht 99.49 million together with the surcharges of Baht 60.12 million or in aggregate of Baht 159.61 million.

In making the preliminary review over the documentations, the Company found that the serial numbers and amounts stipulated in Import Declaration Forms specified in the Notices from the Customs Department did not match to the Company's record. In addition on 5 October 2010, the Customs Department, the authority conducting the investigation, informed the Company that its freight forwarders have forged the customs documents and receipts and provided fraudulent documents to the Company. The Company has requested the related documents and received 3 set of related documents from the Customs Department. Subsequently on 19 October 2010, the Company sued its freight forwarders including their authorised representatives. The Civil Court has ruled that there were sufficient on ground under the Criminal Code to accept the lawsuit against the freight forwarders together with their authorised representatives.

On 25 May 2016, the Company received the second assessment notice from the Customs Department which included 135 copies concerning assessments of customs duty, value added tax and surcharges on imports of raw materials and machineries during the years 2007 - 2010 on the basis of which the officials did not include in the first assessment notice. According to the notices, the Company was called for underpayments of tax and was required to pay the shortfall and surcharges totaling of Baht 90.36 million.

To the best of its knowledge, the management believes that the Company has been made appropriate actions and has no intention to defraud to the government. The Company believes that the evidences showing the customs clearing and receipts from the Customs Department which contained the signature of custom officials were certified that the transactions were true and correct. Moreover the management believes that the tax assessment will not have the impact to the Company or otherwise not exceeding the shortfall of custom duty and value added tax of Baht 21.28 million (surcharges included). As a result, the Company has reserved the tax liability assessment of Baht 21 million in the 2016 financial statements.

Subsequently on 9 September 2017, the Company received the decision from the Appeal Committee of the Revenue Department dated 5 July 2017 regarding the appeal related to value added tax submitted by the Company dated 23 June 2016 and 19 September 2016. The decision was to rescind the additional tax assessment of Baht 90.36 million in accordance with the second tax assessment notice following the unlawful provisional tax assessment.

In addition, the decision also addressed the disputes under the first tax assessment notice which called for the shortfall and surcharges totaling of Baht 159.61 million. Based on the foundation of the truth and relevant law enforcement, the Company did not submit an appeal for the first tax assessment notice. Therefore the disputes arising from the tax assessment were resolved. As a result, in 2017, the management has recognised the tax liabilities in accordance with the first tax assessment notice amounting to Baht 159.61 million plus the surcharges of Baht 39.37 million, in 2018, the Company recognised the additional surcharges of Baht 2.61 million or in aggregate of Baht 201.59 million. Subsequently on 25 October 2018, the Company made the payment of Baht 152.24 million for the value added tax and the surcharges to the Revenue Department according to the Notice of assessment No.1 from the Custom Department. On 18 March 2019, the Company made the remaining payment of Baht 49.65 million for the value added tax and surcharges and additional surcharge of Baht 0.30 million to the Revenue Department.

25.7 Contingent liabilities for litigations

In 2018, the Group received civil lawsuit summons together with copies of complaints filed by its former employees. The former employees petitioned the Thai courts to order the Group to pay compensation amounting to Baht 181 million for alleged breaches of contract arising from the termination of their employment, together with pre and post judgment interest. Currently, the lawsuits are at the preliminary stage. However, the Group's management believes that the evidence it has will enable it to defend the case.



26. Fair value hierarchy

As at 31 December 2019 and 2018, the Group had significant assets that were disclosed at fair value using levels of inputs as follows:

(Unit: Million Baht)

							(Orne. Iviiii	on Bant)
	Consolidated financial statements							
		20	19		2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets for which fair value are disclosed								
Investment properties	-	-	310	310	-	-	306	306
							(Unit: Milli	on Baht)
			Sepa	ırate finan	icial staten	nents		
		20	19			20	18	
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets for which fair value are disclosed								
Investment properties	-	-	310	310	-	-	241	241

27. Financial instruments

27.1 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, short-term loan to, trade and other payables, short-term loan. The financial risks associated with these financial instruments and how they are managed is described below.

Credit risk

The Group is exposed to credit risk primarily with respect to trade accounts receivable, loans to and other receivable. The Group manages the risk by adopting appropriate credit control policies and procedures and therefore 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 receivables, loans to and other receivables as stated in the statement of financial position.



Interest rate risk

The Group's exposure to interest rate risk relates primarily to its cash at bank, and interest-carrying short-term loans. 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 31 December 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)

	Consolid					
		2019				
	Floating	Non- interest		Effective		
	interest rate	bearing	Total	interest rate		
				(% per annum)		
Financial Assets						
Cash and cash equivalents	218	5	223	0.00 - 0.63		
Trade and other receivables		509	509	-		
	218	514	732			
Financial liabilities						
Trade and other payables	-	511	511	-		
Short-term loans from related parties	657		657	0.50 - 1.93		
	657	511	1,168			

(Unit: Million Baht)

	Consolid			
	Floating	Non- interest		Effective
	interest rate	interest rate bearing		interest rate
				(% per annum)
Financial Assets				
Cash and cash equivalents	195	56	251	0.05 - 1.00
Trade and other receivables		339	339	-
	195	395	590	
<u>Financial liabilities</u>				
Trade and other payables	-	480	480	-
Short-term loans from related parties	827		827	1.65 - 1.68
	827	480	1,307	



Separate financial statements

	Floating Non- interest			Effective
	interest rate	bearing	Total	interest rate
				(% per annum)
Financial Assets				
Cash and cash equivalents	77	5	82	0.00 - 0.38
Trade and other receivables	-	512	512	-
Short-term loans to related party	351		351	1.40 - 1.90
	428	517	945	
Financial liabilities				
Trade and other payables	-	528	528	-
Short-term loans from related parties	657		657	1.40 - 1.90
	657	528	1,185	

(Unit: Million Baht)

Separate financial statements

	Floating	Non- interest		Effective
	interest rate	bearing	Total	interest rate
				(% per annum)
Financial Assets				
Cash and cash equivalents	118	1	119	0.13 - 0.38
Trade and other receivables	-	363	363	-
Short-term loans to related party	385		385	1.65 - 1.90
	503	364	867	
Financial liabilities				
Trade and other payables	-	413	413	-
Short-term loans from related parties	1,239		1,239	1.65 - 1.68
	1,239	413	1,652	

Foreign currency risk

The Group's exposure to foreign currency risk arises mainly from purchase/sales of goods and purchases of machinery transactions that are denominated in foreign currencies.

As at 31 December 2019 and 2018, the balances of financial assets and liabilities denominated in foreign currencies are summarised below.

Foreign currency	y Financial assets Financial liabilities		liabilities	Average exchange rate		
	2019	2018	2019	2018	2019	2018
	(Million)	(Million)	(Million)	(Million)	(Baht per 1 foreign currency uni	
US dollar	12	6	-	-	30.1084	32.4498
JPY	16	82	126	5	0.2754	0.2931

28. Capital management

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 31 December 2019, the Group's debt-to-equity ratio was 0.92:1 (2018: 1.13:1) and the Company's debt-to-equity ratio was 0.88:1 (2018: 1.77:1).

29. Events after the reporting period

On 21 February 2020, the Company's Board of Directors' Meeting passed a resolution approving a dividend payment from the Company's operating profit of the year 2019 at Baht 1.00 per share for 20,000,000 ordinary shares, amounting to Baht 20 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.

30. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 21 February 2020.







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