109

Stock Code: 4739

Coremax Corporation

Year 2020

Annual Report

Prepared by Coremax Corporation

Printed on May 7, 2021

Annual Report Inquiry Link:http://mops.twse.com.tw
Website of the Company: http：//www.coremaxcorp.com

I. Names, positions, contact numbers, and e-mail addresses of spokesperson and acting spokesperson:

Item	Spokesperson	Deputy Spokesperson
Name:	Weng, Chih-Hsien	Lu,Poju
Position:	Chief Finance Officer	Deputy Manager of Finance Department
Telephone No.:	(03) 598-3101	(03) 598-3101
Email:	dennis.weng@coremaxcorp.com	lupo.lu@coremaxcorp.com

II. Addresses and Telephone Numbers of Headquarters, Subsidiary and Factory Plant

Unit	Address	TEL
Headquarter	No.11, Wenhua Road, Hsinchu Industrial Park, Hsinchu County	(03)598-3101
Plant	No.11, Wenhua Road, Hsinchu Industrial Park, Hsinchu County	(03)598-3101
Plant	No.440, Zhonghua Road, Toufen City, Miaoli County 351029	(037)631-018

III. Name, Address, Website and Telephone Number of Stock Transfer Agent & Registrar

Name: Stock Affair Agency Department, Grand Fortune Securities Co., Ltd.
Address: 6F, No. 6, Zhongxiao W. Rd., Sec. 1, Zhongzheng District, Taipei City 10041
Telephone No.:(02)2383-6888
Website: http：//www.gfortune.com.tw

IV. Name of the CPAs who duly audited the annual financial report for the most recent fiscal year, and the name, address and telephone number of said person's accounting firm.

Name of CPAs: Yu, Wan-Yuan CPA; Yu, Chi-Lung CPA
Name of Accounting Firm: KPMG Taiwan
Address: 68F, No. 7, Xinyi Rd., Sec. 5, Taipei City
Telephone No.:(02)8101-6666
Website: http：//www.kpmg.com.tw

V. Name of any exchanges where the company's securities are traded offshore, and the method by which to access information on said offshore securities: Not applicable

VI. Company website: http：//www.coremaxcorp.com

Table of Contents

One. Letter to Shareholders

Dear Shareholders,

In 2020, the world underwent the coronavirus pandemic, the Coremax Corporation was able to sustain stable operating performance. Although suffered the slip on operating revenue caused by the metals prices drop, the shipments remained at high volume, production and sales revenue remained steady, and profits slightly raised compared with the previous year.

In the coming future, Coremax Corporation continues to expands the operation with the finest quality on its services and products. The production capacity will be adjusted timely according to the market demand, while persist in improving the less efficient production lines . The company believes that with highly effective and efficient production, coupled with the sound management system, will lay a solid foundation and generate a strong growth momentum for the company's prosperity in the next few years.

The Coremax Corporation has announced its 5 core values and 25 key indicators, and has adopted the "Core Value and Key Conduct Indicator Assessment ." To increase cohesion, it hopes that all of the group's employees can uphold consistent beliefs, and can demonstrate the Coremax Value in daily work and methodology. We expect that every grope member works toward common goals, would ultimately form an effective corporate culture.

All staff of Coremax Corporation do their best at their posts and create greater benefit for shareholders.

I. Achievements of each plan of operation or business

The company’s operating results for 2020 have been audited by KPMG accountants, Wanyuan Yu and Chilung Yu. The audited operating results are follows:

Unit: NT$ (thousand)

Item/Year	2019	2020
Operating revenue	6,369,520	5,285,365
Gross Profit	489,940	475,469
Income from Operations	240,618	216,302
Earnings before Interest and Tax	228,043	206,434
Earnings after Interest and Tax	153,067	165,645
Earning per Share (in NTD)	1.40	1.73

II. Budgets Execution

Unit: NT$ (thousand)

Item/Year	2020		
	Actual revenue	Budget revenue	Achieving rate
Operating revenue	5,285,365	5,770,231	92%
Operating cost	(4,809,896)	(5,265,884)	91%
Gross Profit	475,469	503,347	94%
Operating expenses	(259,167)	(275,053)	94%
Income from Operations	216,302	229,294	94%

III. Financial Income , Costs and Profitability Analysis

1. Financial Income and Costs

The cash inflow generated from the company's operating activities was the outcome of decreased purchasing costs, which were basically caused by two factors, stabilizing raw material unit price and sound inventory control. The increase in cash outflow from investment activities compared with the previous period was chiefly due to plant construction and equipment purchases. The cash inflow from fund-raising activities was chiefly due to increased borrowing and the need for working capital turnover.

Unit: NT$ (thousand)

Item/Year	2019	2020
Net Income Before Tax	228,043	206,434
Net Cash Provided By (Used In) Operating Activities	1,209,918	342,593
Net Cash Provided By (Used In) Investing Activities	(418,392)	(543,540)
Net Cash Provided By (Used In) Financing Activities	(555,588)	132,640
Net Increase (Decrease) In Cash and Cash Equivalents	232,984	(63,265)
Cash And Cash Equivalents at Beginning of Year	534,209	767,193
Cash And Cash Equivalents at End of Year	767,193	703,928

2. Profitability Analysis

Unit: NT$ (thousand)

Item/Year	2019	2020
Returns on Assets, ROA (%)	2.60	2.55
Returns on Equity, ROE (%)	3.73	4.13
Operating Profit / Capital Employed (%)	25.86	23.25
Net Operating Profit Before Tax /Total Capital Employed (%)	24.51	22.19
Profit Margin (%)	2.40	3.13
Earning per Share (in NTD)	1.40	1.73

IV. Research and Development

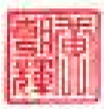
This company had NTD 29,438,000 in R&D expenditures during 2020. The chief goals of this R&D were to accommodate the development of new products by customers and markets, continue to improve production processes and product quality, enhance production efficiency for all products, reduce wastage of raw materials, and boost competitiveness.The following are this company's current R&D plans:

1. Short-term plan:
   (A) Improvement of existing product quality in order to better meet customers' needs.
   (B) Improvement of processes, which will allow the production of products with different physical characteristics.
   (C) Improvement of quality on the fertilizer production line.
2. Mid-term plans:
   (A) In order to accommodate the market's development, formulation of hydrochloric acids with different ratios of such metals as nickel, cobalt, and manganese.
   (B) Development of new cobalt and manganese recovery technologies and new processes in order to enhance recovery volume, efficiency, and quality.

V. Expected Sales Volume and Its Basis

With strategic collaboration of its R&D, manufacturing and management functions, the company’s products will become more diversified and marketable in 2021. The sales team will continue to actively develop domestic and international markets and increase the market share of the company’s products. The company believes that its leading market position and competitive advantages will be maintained through the joint efforts of its committed staff.

Chairman: Ho, Chi-Cheng 

Presiden: Huang, Chao-Hui 

Accounting Manager: Weng, Chih-Hsien 

Two. Company Overview

I. Date of Establishment

The Company was established on June 16, 1992

II. Company History

(I) Key milestones of the Company

Year	Month	Major event
1961	May	Heng I Chemical was established in Taipei, with the capital of NT$100 thousand.
1975	July	Uranus Chemicals was established, with the capital of NT$3,000 thousand.
1976		Uranus Chemicals established the Chunghwa Plant. It completed the first oxalic acid plant with its own technology developed independently.
1984	April	Uranus Chemicals invested in establishing Hsinhai Rare Earth Industry Co., Ltd. in Hsinchu Industrial Park to produce rare earth metal compounds; the second oxalic acid plant was established in Taichung Industrial Park. The capital increase by cash for NT$27,000 thousand was conducted, and the paid-in capital increased to NT$30,000 thousand.
1990	November	Uranus Chemicals established a zirconia crystal (Cubic Zirconia refinement) plant to extend the rare earth oxide product line; the capital increase by cash for NT$160,000 thousand was conducted, and the paid-in capital increased to NT$190,000 thousand.
1992	June	The Company was established with a capital of NT$5,000 thousand.
	September	The Company completed the plant construction. It conducted the capital increase in cash for NT$20,000 thousand; the paid-in-capital increased to NT25,000 thousand.
	October	First oxidation catalysts production line began operation.
1992		Uranus Chemicals and Swiss Coremax set up a plan in a partnership, to establish the Uranus Coremax Material Technology Co., Ltd, for the production of cobalt acetate catalyst.
1993	January	A swiss company, SMC AG, invested the Company; the capital increase in cash was conducted for NT$25,000 thousand; the paid-in-capital increased to NT50,000 thousand. Uranus Chemicals established the production plant to developed tin compound (stannous chloride).
1994	December	The Company completed the first waste catalyst recovery plant production line, to provide the renewal service of waste catalyst to customers.
1995	February	The Company conducted the capital increase in cash for NT$30,000 thousand; the paid-in-capital increased to NT80,000 thousand.
1996		Heng I Chemical built a zirconium silicate.
	September	The Company renamed to CoreMax Taiwan Corporation.
	October	The Company was awarded ISO 9002 certification.

1997	March	The Company completed the second waste catalyst recovery plant production line.
1998	January	The Company obtained the permit of recycling the waste catalyst issued by the Environmental Protection Administration, Executive Yuan.
1999	July	The Company completed advanced materials and battery materials production lines.
2000		Heng I Chemical built an automated packing compound fertilizer plant.
	July	The Company signed the contract with the " Industrial materials Research Institute-Industrial Technology Research Institute" to research the "High Performance Lithium Battery Cathode Material."
	December	The Company received grants from the Industrial Development Bureau, MOEA, under the "Development Project of New Leading Products," to implement the "Development Project of High Performance Lithium Battery Cathode Material."
		The Taiwanese shareholders of the Company bought all the stake held by SMC AG, and changed the Company name to "CoreMax Corporation."
		The Company conducted the capital increase in cash for NT$30,000 thousand; the paid-in-capital increased to NT$110,000 thousand.
2001	April	The Company established "CoreMax Malaysia Sdn. Bhd." in Kuantan, Malaysia, as the first overseas oxidation catalyst production line.
	October	The Company conducted the capital increase in cash for NT$16,800 thousand, and surplus transferred to capital for NT$13,200 thousand; the paid-in-capital increased to NT140,000 thousand.
	November	The Company established CoreMax Zhuhai Chemical Co., Ltd. for in Zhuhai, China, as the second overseas oxidation catalyst production line.
2002	March	The Kuantan Plant, Malaysia started mass production and delivered.
	October	The Zhuhai Plant, China started mass production and delivered.
2003	May	The Company conducted the surplus transferred to capital for NT$28,000 thousand; the paid-in-capital increased to NT$168,000 thousand.
	October	The Company expanded the production lines of battery materials.
2004	June	The Company conducted the surplus transferred to capital for NT$50,400 thousand; the paid-in-capital increased to NT$218,400 thousand.
	September	The Company established CoreMax Ningbo Chemical Co., Ltd., as the third overseas oxidation catalyst production line.
	December	The Company conducted the capital increase in cash for NT$50,000 thousand; the paid-in-capital increased to NT$268,400 thousand.
2005	July	The Company conducted the surplus and employee bonus transferred to capital for NT$56,180 thousand; the paid-in-capital increased to NT$324,580 thousand.
2007	July	The Company conducted the surplus transferred to capital for NT$16,229 thousand; the paid-in-capital increased to NT$340,809 thousand.
2007	October	Uranus Chemical conducted the capital increase in cash for NT$38,000 thousand; the paid-in-capital increased to NT$228,000 thousand.

2008	July	The Company conducted the surplus and employee bonus transferred to capital for NT$25,857 thousand; the paid-in-capital increased to NT$366,666 thousand.
2009	March	The Company established Coremax (Thailand) Co., Ltd., as the fourth overseas oxidation catalyst production line.
	August	The Company was awarded ISO14000 certification
	August	The Company conducted the surplus transferred to capital for NT$18,333 thousand; the paid-in-capital increased to NT$384,999 thousand.
	November	The Company's Taiwan plant expanded the power battery production lines.
2010	March	The Thailand Plant, the fourth overseas oxidation catalyst production line, started mass production.
	April	The Company conducted the capital increase in cash for NT$30,000 thousand; the paid-in-capital increased to NT$414,999 thousand.
	June	The Company's Toufen Plant expanded the production lines of battery materials.
	October	The production lines of battery materials in the Company's Toufen Plant started mass production.
	November	The Company was registered as the emerging stock.
2011	July	The Company conducted the capital increase in cash via private placement for NT$30,000 thousand to introduce the strategic investor, Itochu Corporation; the paid-in-capital increased to NT$444,999 thousand.
		The Company established CoreMax (Zhangzhou) Chemical Co., Ltd. in Gulei Peninsula of Zhangzhou City, Fujian, as the fifth overseas oxidation catalyst production line.
	December	The Company was traded at OTC, with the capital increase in cash for NT$41,300 thousand; the paid-in-capital increased to NT$486,299 thousand.
2012	August	The Company issued the first batch of five-year secured convertible corporate bonds with zero coupon rate for NT$400,000 thousand. The face value of each bond was NT$100 thousand. The purpose was to re-invest subsidiaries and repay loans.
		Uranus Chemicals conducted the surplus transferred to capital for NT$22,800 thousand; the paid-in-capital increased to NT$250,800 thousand.
	September	The subsidiary, Heng I Chemical increased the paid-in-capital to NT$275,000 thousand.
2013	March	The subsidiary, Heng I Chemical, built the sulfuric acid eighth plant.
	October	The surplus transferred to capital was conducted for NT$24,315 thousand; the paid-in-capital increased to NT$510,614 thousand.
2014	May	The corporate bonds were converted to the capital increase for NT$3,557 thousand; the paid-in-capital increased to NT$514,171 thousand.
	August	The corporate bonds were converted to the capital increase for NT$412 thousand; the paid-in-capital increased to NT$514,583 thousand.
	October	The subsidiary, Heng I Chemical conducted the capital increase in cash for NT$25,000 thousand; the paid-in-capital increased to NT$300,000 thousand.
	December	The corporate bonds were converted to the capital increase for NT$69,634

		thousand; the paid-in-capital increased to NT584,217 thousand.
	April	The corporate bonds were converted to the capital increase for NT$32,146 thousand; the paid-in-capital increased to NT$616,363 thousand.
	May	The corporate bonds were converted to the capital increase for NT$68,010 thousand; the paid-in-capital increased to NT$684,373 thousand.
	June	The Company issued the second batch of five-year secured convertible corporate bonds with zero coupon rate for NT$600,000 thousand. The face value of each bond was NT$100 thousand. The purpose was to re-invest subsidiaries and repay loans.
	August	The corporate bonds were converted to the capital increase for NT$18,273 thousand; the paid-in-capital increased to NT$702,646 thousand.
	October	The subsidiary, Heng I Chemical conducted the capital increase in cash for NT$98,000 thousand; the paid-in-capital increased to NT$398,000 thousand.
2016	February	The corporate bonds were converted to the capital increase for NT$36,998 thousand; the paid-in-capital increased to NT$739,644 thousand.
	May	The corporate bonds were converted to the capital increase for NT$6,809 thousand; the paid-in-capital increased to NT$746,453 thousand.
	September	The corporate bonds were converted to the capital increase for NT$10,691 thousand; the paid-in-capital increased to NT$757,144 thousand.
	November	The corporate bonds were converted to the capital increase for NT$110 thousand; the paid-in-capital increased to NT$757,254 thousand.
	December	The Company planned to establish the third battery material production line in Toufen, Taiwan.
2017	August	The corporate bonds were converted to the capital increase for NT$723 thousand; the paid-in-capital increased to NT$757,977 thousand.
	June	The Company applied for public listing in TWSE to TWSE.
	August	The Board of TWSE approved the public trading of the Company’s share; the Company’s shares were officially listed in September.
	September	The subsidiary Uranus Chemicals conducted the capital increase in cash for NT$49,200 thousand; the paid-in-capital increased to NT$300,000 thousand.
	October	The Company’s new third battery material production line started mass production.
	November	The corporate bonds were converted to the capital increase for NT$103,257 thousand; the paid-in-capital increased to NT$861,234 thousand.
2018	April	The subsidiary, Uranus Chemicals conducted the capital increase in cash for NT$100,000 thousand; the paid-in-capital increased to NT$400,000 thousand.
	April	The corporate bonds were converted to the capital increase for NT$3,503 thousand; the paid-in-capital increased to NT$864,737 thousand.
	May	For the expansion of operations, the subsidiary, Uranus Chemicals, bought lands and buildings in Hsinchu Industrial Park; the space of lands and buildings is 3,880 pings and 3,900 pings, respectively. The transaction amount is NT$558,000 thousand.
	May	The corporate bonds were converted to the capital increase for NT$1,525

		thousand; the paid-in-capital increased to NT$866,262 thousand.
	August	The corporate bonds were converted to the capital increase for NT$1,205 thousand; the paid-in-capital increased to NT$867,467 thousand.
	November	The corporate bonds were converted to the capital increase for NT$985 thousand; the paid-in-capital increased to NT$868,452 thousand.
	December	The Company conducted the capital increase in cash for NT$60,000 thousand; the paid-in-capital increased to NT$928,452 thousand.
2019	April	The subsidiary, Uranus Chemicals conducted the capital increase in cash for NT$100,000 thousand; the paid-in-capital increased to NT$500,000 thousand.
	April	The corporate bonds were converted to the capital increase for NT$965 thousand; the paid-in-capital increased to NT$929,417 thousand.
	May	The corporate bonds were converted to the capital increase for NT$876 thousand; the paid-in-capital increased to NT$930,293 thousand.
2020	September	The subsidiary Uranus Chemicals conducted the capital increase out of additional paid-in capitalby 2,000 thousand shares, with NT$20,000 thousand surplus.; the paid-in-capital increased to NT$520,000 thousand.
2021	January	The Company conducted the capital increase in cash for NT$10,000 thousand; the paid-in-capital increased to NT$1,030,293 thousand.
	February	The subsidiary, Heng I Chemical conducted the seasoned equity offering for NT$100,000 thousand; the paid-in-capital increased to NT$498,000 thousand.

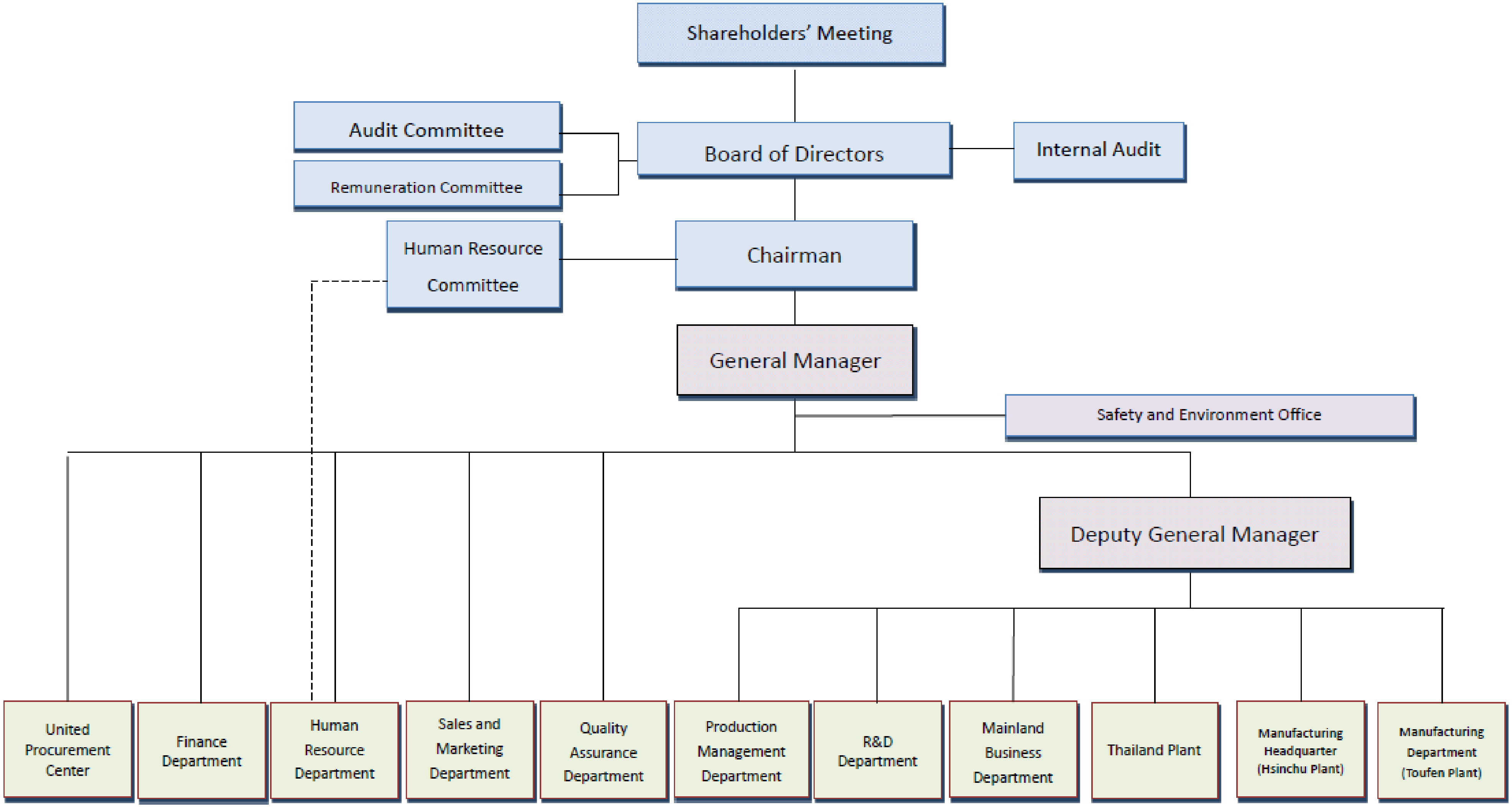
(II) For the most recent fiscal year as well as the current fiscal year up to the date of publication of the annual report, information on the following: merger and acquisition activities; strategic investments in affiliated enterprises; corporate reorganization; instances in which a major quantity of shares belonging to directors, supervisors, or shareholders holding greater than a 10 percent stake in the company is transferred or otherwise changes hands; any change in managerial control; any material change in operating methods or type of business; and any other matters of material significance that could affect shareholders' equity. This section shall further explain how the above matters will affect the company: None

Three. Report on Corporate Governance

I. Organizational system:

(I) Organizational Chart

Date: May 4, 2021



(II) Business of Each Functions

Unit	Business operated
Sales and Marketing Department	New market development and product marketing, including product positioning, pricing, and establishment of production and sales channels.
Headquarter of Manufacturing	1. Related matters such as product manufacturing and packaging. 2. Planning and manufacturing process for trial production and mass production of new products. 3. Coordinate quality control, production management and manufacturing operations, to ensure that the production quality, output, and delivery time to meet customer requirements. 4. Integrate the resources of quality control, production management and manufacturing departments, implement various plans based on the Company's annual guidelines, plan production and sales, and manage personnel, machines, and materials.
R&D Technology Department	1. New product development design, planning and implementation, coordination of new product production transfer, and the establishment and implementation of other development process systems. 2. Specific project execution and follow-up. 3. Evaluation and introduction of new technologies and products. 4. Assist the manufacturing department in improving production quality, increase yield, and reduce costs. 5. Establish and implement product design control processes and procedures.
Finance Department	1. Support and manage the general affairs and administrations. 2. The Company’s information system planning, management, application and maintenance. 3. External legal affairs and document review. 4. Management of the Company’s funds, budgeting, preparation of accounting data, cost settlement, handling taxations, and the establishment and implementation of the accounting system. 5. Responsible for the handling of stock affairs. 6. Responsible for external public relations
Human Resource Department	Implementation and planning of functions of human resource management, such as selection, cultivation and retention.
Production Management Department	1. Production scheduling, interfacing manufacturing and sales departments to maximize production efficiency. 2. Responsible for material management operations, including material in-stocking, inventory and product shipment operations. 3. Inventory control of key raw materials.
United Procurement Center	1. Responsible for the inquiries, price comparison, price negotiation, and procurement of raw materials and equipment. 2. Collect and analyze the supply and demand situation of various raw materials and market conditions.
Audit Office	1. Planning, implementation and amendment of the internal control system. 2. The formulation and implementation of the annual audit plan. 3. Drafting and implementing the self-inspection operation plan of each unit and subsidiary. 4. Other matters to be implemented pursuant to laws and regulations.

II. Information on the company's directors, supervisors, general manager, assistant general managers, deputy assistant general managers, and the supervisors of all the company's divisions and branch units

(I) Directors

1. Information on Directors

Date: April 6, 2021

Position	Nationality or place of incorporation	Name	Gender	Date elected	Term of office(Years)	Date of Date elected	Shareholding when being elected		Current shares held		Shares held by spouses, children of minor age		Shareholding under other person(s)		Educational and professional experience	Concurrent Position(s) in the Company and other companies	Spouse or Relative within the Second Degree of Kinship Holding Other Managerial, Director or Supervisor Position			Remarks
							Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio			Position	Name	Relationship	
Chairman	Republic of China	Ho, Chi-Cheng	Male	June 12, 2020	3	February 2. 2004	828,262	0.89	903,566	0.88	–	–	–	–	Educational background Department of History MBA, Missouri State University Professional background Deputy General Manager, RTA Co., Ltd. Deputy General Manager, Uranus Chemicals Co., Ltd.	Chairman, Coremax Corporation Chairman, Chang Sing Investment Co., Ltd. Chairman, Cheng Jade Enterprise Co., Ltd. Chairman, Heng I Chemical Co., Ltd. Director, Cheng De Investment Co., Ltd. Director, Heng Mian Investment Co., Ltd. Chairman and General Manager, Uranus Chemicals Co., Ltd. Chairman, Coremax (BVI) Corp. Chairman, CoreMax Zhuhai Chemical Co., Ltd. Chairman, CoreMax Ningbo Chemical Co., Ltd. Chairman, Coremax (Thailand) Co., Ltd. Chairman, CoreMax (Zhangzhou) Chemical Co., Ltd. Chairman, Jiangxi Tianjiang Materials Limited	Director Director	Ho, Eugene Lawrence Ho, Chi-Chou	1st degree of kinship 2nd degree of kinship	

Position	Nationality or place of incorporation	Name	Gender	Date elected	Term of office(Years)	Date of Date elected	Shareholding when being elected		Current shares held		Shares held by spouses, children of minor age		Shareholding under other person(s)		Educational and professional experience	Concurrent Position(s) in the Company and other companies	Spouse or Relative within the Second Degree of Kinship Holding Other Managerial, Director or Supervisor Position			Remarks
							Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio			Position	Name	Relationship	
Director	Republic of China	Chang Sing Investment Co., Ltd.	–	June 12, 2020	3	June 2, 2011	13,202,833	14.19	13,802,833	13.40	–	–	–	–	–	–	–	–	–	
	Republic of China	Representative Chiu, Hsien Tung (Note 1)	Male	April 1, 2021	3	April 1, 2021	–	–	11,454	0.01	9,000	0.01	–	–	Department of Accounting, Chung Yuan Christian University Specialist, Cathay Construction Co., Ltd. Auditor, PwC Taiwan	Manager, Management Department, Heng I Chemical Co., Ltd.	None.	None.	None	
Director	Republic of China	Cheng Jade Enterprise Co., Ltd.	–	May 26, 2017	3	June 2, 2011	12,156,477	13.07	13,261,727	12.87	–	–	–	–	–	–	–	–	–	
	U.S.	Representative Ho, Eugene Lawrence (Note 2)	Male	July 14, 2020	3	July 14, 2020	–	–	229,927	0.22	–	–	–	–	Bachelor in Economics, University of California, Santa Barbara Sales specialist, Chemical Department, Itochu Corporation, Japan Sales specialist, Itochu Chemical Frontier Corporation	Director, Uranus Chemicals Co., Ltd. Supervisor, Heng I Chemicial Co., Ltd. Director, Cheng De Investment Co., Ltd. Director, Heng Mian Investment Co., Ltd.	Chairman	Ho, Chi-Cheng	1st degree of kinship	
Director	Republic of China	Ho, Chi-Chou	Male	June 12, 2020	3	June 1, 2018	550,267	0.59	511,114	0.50	29,005	0.03	–	–	EMBA, National Chiao-Tung University VP in Sales, Coremax Corporation Special Assistant to President, Shih Her Technologies Inc.	President, Qixiang Light Metal Technology Co., Ltd. Director, Cheng Jade Enterprise Co., Ltd. Director, Uranus Chemicals Co., Ltd. Director, Chang York Technologies Inc. Supervisor, Heng I Chemicial Co., Ltd. Supervisor, Chang Sing Investment Co.,	Chairman	Ho, Chi-Cheng	2nd degree of kinship	

Position	Nationality or place of incorporation	Name	Gender	Date elected	Term of office(Years)	Date of Date elected	Shareholding when being elected		Current shares held		Shares held by spouses, children of minor age		Shareholding under other person(s)		Educational and professional experience	Concurrent Position(s) in the Company and other companies	Spouse or Relative within the Second Degree of Kinship Holding Other Managerial, Director or Supervisor Position			Remarks
							Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio			Position	Name	Relationship	
																Ltd.				
Director	Republic of China	Cheng, Chih-Fa	Male	June 12, 2020	3	December 24, 2008	—	—	—	—	—	—	—	—	Department of Accounting, National Chung Hsing University CPA, ShineWing Accounting Firm Taiwan	CPA, Jing-Hsing United Accounting Firm Director, Golden Point Management Ltd. Director, Yuan Fu Tai Development Ltd. Chairman, Sen Berger Investment Co. Ltd. Independent Director, Shin Zu Shing Co., Ltd. Director, Shih Her Technologies Inc. Independent Director, Hong Yi Fiber Ind. Co., Ltd Director, Ezfly International Travel Agent Co., Ltd. Director, GSD TECHNOLOGIES CO.,LTD (Cayman) Director, Uranus Chemicals Co., Ltd. Chairman, Yu Hsing Management Consulting Co., Ltd.	None.	None.	None	
Director	Republic of China	Lai, Ching-Yuan	Male	June 12, 2020	3	June 1, 2018	20,000	0.02	21,000	0.02	—	—	—	—	Department of Chemical Engineering, National Cheng Kung University Executive VP, Heng I Chemical Co., Ltd. Chief of Plant, Taiwan Prosperity Chemical Corporation Associate VP, China American Petrochemical Co., Ltd.	Director, Heng I Chemical Co., Ltd. General Manager, Heng I Chemical Co., Ltd.	None.	None.	None	

Position	Nationality or place of incorporation	Name	Gender	Date elected	Term of office(Years)	Date of Date elected	Shareholding when being elected		Current shares held		Shares held by spouses, children of minor age		Shareholding under other person(s)		Educational and professional experience	Concurrent Position(s) in the Company and other companies	Spouse or Relative within the Second Degree of Kinship Holding Other Managerial, Director or Supervisor Position			Remarks
							Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio	Number of shares	Shareholding Ratio			Position	Name	Relationship	
Independent Director	Republic of China	Hsu, I-Ping	Male	June 12, 2020	3	December 24, 2008	—	—	—	—	53,511	0.06	—	—	Department of Aerospace Engineering, Tamkang University Doctorate Program of Mechanical Engineering, University of Wisconsin, Milwaukee President, Hsinchu Bus Company, Ltd.	Chairman, Hsinchu Bus Company, Ltd. Chairman, HCT Logistics Director, Digiwell Technology Inc. Chairman, Yi-Meng Co., Ltd.	None.	None.	None	
Independent Director	Republic of China	Wang, Wen-Tsung	Male	June 12, 2020	3	December 24, 2008	—	—	—	—	—	—	—	—	Department of Accounting, Feng Chia University Senior Auditor, KPMG Taiwan Partner CPA, Huei-Ming Accounting Firm	Partner CPA, Biing-Cherng CPAS Independent Director, Sysage Technology Co.,Ltd. Supervisor, Emax Tech Co., LTD. Director, Tian Ai Artistic Hall Co., Ltd.	None.	None.	None	
Independent Director	Republic of China	Chang,Yuan-Lung	Male	June 12, 2020	3	May 26, 2017	—	—	—	—	—	—	—	—	Department of Accounting, Tamkang University CPA, Ching-Cheng Accounting Firm	CPA, Ching-Cheng Accounting Firm Independent Director, GSD Technologies Co.,Ltd. Independent Director, Shin Zu Shing Co., Ltd.	None.	None.	None	

Note 1: The representative of the institutional director, Huang, Chao-Hui, was replaced by Chiu, Hsien Tung on April 1, 2021.
Note 2: The representative of the institutional director, Ho, Chi-Chao, was replaced by Ho, Eugene Lawrence on July 14, 2020

2. Major Shareholders of Institutional Shareholders

Name of Institutional Shareholder	Major Shareholders of Institutional Shareholders
Chang Sing Investment Co., Ltd.	Cheng Jade Enterprise Co., Ltd. (80.17％); Huang, Jin-Yun (4.36％); Huang, Tsan- Hui (2.94％); Dai, Ming-Hsun (2.18％); He, Yi-Hsuan (1.89％); Huang, Chao-Hui (1.45％); He, Jin-Ming (1.45％); Chen, Yi-Ru(1.45％).

3. Major shareholders of institutional shareholders who are also institutional shareholders, their major shareholders (Note 1)

Name of institutional shareholder	Major Shareholders of the Company’s Institutional Shareholders
Cheng Jade Enterprise Co., Ltd.	Heng Mien Investment (19.69％); Cheng De Investment (19.65%); He, Mei-Fang (14.80％); Ho, Chi-Chao (13.32％); Ho, Chi-Chou (13.32％); He Lai, Rui-Jen (8.88％); Ho, Chi-Cheng (2.96％); Chen, Yi-Ru (2.96％); Kuo, Shi-Wei (1.48％); He, Wen-Ding (1.48％); He, Wen-Hsiang (1.48％).

4. Professional Qualifications and Independence Analysis of Directors and Supervisors:

Criteria / Name	Having met one of the following professional qualifications, together with at least five years of work experience			Independence Criteria (Note)												Number of other public companies in which the individual is concurrently serving as an independent director
	An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the company in a public or private junior college, college or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialists who have passed a national examination and been awarded a certificate in a profession necessary for the business of the company	Having work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the company	1	2	3	4	5	6	7	8	9	10	11	12	
Ho, Chi-Cheng	—	—	✓	-	-	-	-	-	✓	-	-	-	-	✓	✓	0
Chang Sing Investment Co., Ltd. Representative: Chiu, Hsien Tung	—	—	✓	-	-	✓	✓	✓	✓	✓	-	✓	✓	✓	-	0
Cheng Jade Enterprise Co., Ltd. Representative: Ho, Eugene Lawrence	—	—	✓	-	-	✓	-	✓	✓	✓	-	✓	-	✓	-	0
Ho, Chi-Chou	—	—	✓	✓	-	✓	-	-	✓	✓	-	✓	-	✓	✓	0
Cheng, Chih-Fa	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2
Lai, Ching-Yuan	—	—	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Hsu, I-Ping	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Wang, Wen-Tsung	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1
Chang,Yuan-Lung	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2

Note 1: Director and Supervisor who meet the following conditions two years before the appointment or during the term of appointment, indicate with "✓" at the corresponding boxes below.

(1) Not an employee of the Company or any of its affiliates.
(2) Not a director or supervisor of the Company or any of its affiliates. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)
(3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of issued shares of the Company or ranks as one of its top ten shareholders.
(4) Not a managerial officer mentioned in paragraph (1), or a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship mentioned in paragraphs (2) and (3).
(5) Not a director, supervisor, or employee of an institutional shareholder that directly holds 5% or more of the total number of issued shares of the Company, or ranks as its top five shareholders, or the designated representative pursuant to Article 27 Section 1 or 2 in the Company as director/supervisor. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)
(6) Not a director, supervisor, or employee of other companies with the Board seats or more than half of the voting shares under the control of one person. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)
(7) Not a Director, General Manager or Employee of other company whose Chairperson or general manager are the same person or spouse of the Company. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary).
(8) Not a director, supervisor, managerial officer, or shareholder holding 5% or more of the shares of a specified company or institution with a financial or business relationship with the company. (The same does not apply, however, if specified company or institution possessing shareholdings of more than 20% and less than 50% of the total number of issued shares of the Company, and in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary).
(9) Not a professional individual who, or an owner, partner, director, supervisor, or managerial officer of a sole proprietorship, partnership, company, or institution that provides auditing services or for the past two years, has provided commercial, legal, financial, accounting services or consultation amounted to less than a cumulative NTD500,000 to the Company or any affiliate of the company, or a spouse thereof. However, this does not apply to members of the Compensation Committee, Public Tender Offer Review Committee or Special Merger and Acquisition Committee carrying out their duties in accordance with the Securities and Exchange Act or Business Mergers and Acquisitions Act.
(10) Not a spouse or a relative within two degrees of kinship to any director.
(11) Does not meet any of the criteria described in Article 30 of the Company Act.
(12) Not the proxy of any government agency, juridical person, or their representative that is a shareholder in the Company as outlined in Article 27 of the Company Act.

(II) Information on Directors, General Manager, Deputy General Manager, Assistant Vice President and heads of Departments and Branches

April 6, 2021, Unit: Share; %

<table>
<tr><th rowspan="2">Position</th><th rowspan="2">Nationality</th><th rowspan="2">Name</th><th rowspan="2">Gender</th><th rowspan="2">Date of elected</th><th colspan="2">Shares held</th><th colspan="2">Shares held by Spouse and child of minor age</th><th colspan="2">Shares held under Spouse and child of minor age</th><th rowspan="2">Educational and professional experience</th><th rowspan="2">Concurrent Position(s) in the Company or other companies</th><th colspan="3">Spouse or relative within the second degree of kinship Holding Managerial Position</th><th rowspan="2">Remarks (Note)</th></tr>
<tr><th>Number of shares</th><th>Shareholding Ratio</th><th>Number of shares</th><th>Shareholding Ratio</th><th>Number of shares</th><th>Shareholding Ratio</th><th>Position</th><th>Name</th><th>Relationship</th></tr>
<tr><td>General Manager (Note 2)</td><td>U.S.</td><td>Ho, Eugene Lawrence</td><td>Male</td><td>May 4, 2021</td><td>229,927</td><td>0.22</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Bachelor in Economics, University of California, Santa Barbara
Sales specialist, Chemical Department, Itochu Corporation, Japan
Sales specialist, ITOCHU CHEMICAL FRONTIER Corporation
Deputy General Manager, Uranus Chemicals Co., Ltd.</td><td>Director, Coremax Corporation
Director, Uranus Chemicals Co., Ltd.
Supervisor, Heng I Chemical Co., Ltd.
Director, Cheng De Investment Co., Ltd.
Director, Heng Mian Investment Co., Ltd.</td><td>None.</td><td>None.</td><td>None.</td><td></td></tr>
<tr><td>General Manager (Note 3)</td><td>Republic of China</td><td>Huang, Chao-Hui</td><td>Male</td><td>March 18, 2020</td><td>135,513</td><td>0.13</td><td>—</td><td>—</td><td>650,000</td><td>0.63</td><td>Department of Chemical Engineering, Da-Hua Technology College
General Manager, Uranus Chemicals Co., Ltd.</td><td>Director, CoreMax Ningbo Chemical Co., Ltd.
Director, CoreMax (Zhangzhou) Chemical Co., Ltd.
Chairman, Cheng De Investment Co., Ltd.
Chairman, Director, Heng Mian Investment Co., Ltd.
Chairman, Fan Cheng Investment Co., Ltd.</td><td>None.</td><td>None.</td><td>None.</td><td></td></tr>
<tr><td>Vice President and Chief Finance Officer</td><td>Republic of China</td><td>Weng, Chih-Hsien</td><td>Male</td><td>March 26, 2010</td><td>293,163</td><td>0.28</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Department of Accounting, Tunghai University
Institute of Accounting, Fu Jen University
Associate VP, KPMG Taiwan
Chief of Finance Department, Speed Tech Corp.</td><td>CPA, Li Dian Accounting Firm
Director, Coremax (Thailand) Co., Ltd.
Supervisor, CoreMax (Zhangzhou) Chemical Co., Ltd.
Supervisor, CoreMax Ningbo Chemical Co., Ltd.
Supervisor, Uranus Chemicals Co., Ltd.
Independent Director, Chyang Sheng Dyeing&Finishing Co.,Ltd
Supervisor, Jiangxi Tianjiang Materials Limited
Director, Heng I Chemical Co., Ltd.</td><td>None.</td><td>None.</td><td>None.</td><td></td></tr>
</table>

Deputy General Manager (Note 2)	Republic of China	Chu, Yuh-Ren	Male	May 4, 2021	28,363	0.03	—	—	—	—	Department of Chemical Engineering, Tunghai University EMBA, Xiamen University Deputy General Manager, Uranus Chemicals Co., Ltd.	Director and General Manager, Uranus Chemicals Co., Ltd. Director, Heng I Chemical Co., Ltd.	None.	None.	None.	
Supervisor of Accounting Division (Note 2)	Republic of China	Lu,Poju	Male	May 4, 2021	4,000	—	—	—	—	—	Department of Accounting and Information Technology, National Chung Cheng University Graduate School of Information Management and Finance, National Chiao Tung University Manager, Darwin Precisions Corporation	Accounting Officer, Uranus Chemicals	None.	None.	None.	

Note 1: The book closure date of AGM was April 6, 2021; the shares refer to the shares listed in the shareholder’s registry.
Note 2: The appointment was approved by the Board of Directors on May 4, 2021.
Note 3: Retired on May 4, 2021.

III. Remuneration of Directors, Supervisors, General Manager and Deputy General Manager(s) in the most recent fiscal year

(I) Remuneration of Directors (including Independent Directors) (bracket table according to persons)

December 31, 2020; Unit: NT$thousand

<table>
<tr><th rowspan="4">Position</th><th rowspan="4">Name</th><th colspan="8">Remuneration to Directors</th><th rowspan="2" colspan="2">Sum of A, B, C and D as a percentage of after-tax profit (%)</th><th colspan="8">Compensation to Directors Also Serving as Company Employees</th><th rowspan="2" colspan="2">Sum of A, B, C, D, E, F and G as a percentage of after-tax profit</th><th rowspan="4">Compensation from Affiliates Other than Subsidiaries</th></tr>
<tr><th colspan="2">Remuneration (A)</th><th colspan="2">Pension (B)</th><th colspan="2">Remuneration of Director (C)</th><th colspan="2">Business Department Implementation Fees for Services Rendered (D)</th><th colspan="2">Salary, Bonuses, and Special Allowances, etc (E)</th><th colspan="2">Pension (F)</th><th colspan="4">Share of Profit as an Employee (G)</th></tr>
<tr><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th><th colspan="2">The Company</th><th colspan="2">All companies included in the financial statements</th><th rowspan="2">The Company</th><th rowspan="2">All companies included in the financial statements</th></tr>
<tr><th>Cash Amount</th><th>Stock Amount</th><th>Cash Amount</th><th>Stock Amount</th></tr>
<tr><td>Chairman</td><td>Ho, Chi-Cheng</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">1,031</td><td rowspan="8">2,893</td><td rowspan="8">0.66%</td><td rowspan="8">1.86%</td><td rowspan="8">6,017</td><td rowspan="8">16,312</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">4.54%</td><td rowspan="8">12.38%</td><td rowspan="8">None.</td></tr>
<tr><td>Director</td><td>Itochu Corporation (Note 1)</td></tr>
<tr><td>Director</td><td>Ho, Chi-Chao (Note 3)</td></tr>
<tr><td>Director</td><td>Huang, Chao-Hui (Note 2)</td></tr>
<tr><td>Director</td><td>Ho, Eugene Lawrence (Note 3)</td></tr>
<tr><td>Director</td><td>Ho, Chi-Chou</td></tr>
<tr><td>Director</td><td>Cheng, Chih-Fa</td></tr>
<tr><td>Director</td><td>Lai, Ching-Yuan</td></tr>
<tr><td>Independent director</td><td>Hsu, I-Ping</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">1,368</td><td rowspan="3">1,368</td><td rowspan="3">0.88%</td><td rowspan="3">0.88%</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0</td><td rowspan="3">0.88%</td><td rowspan="3">0.88%</td><td rowspan="3">None.</td></tr>
<tr><td>Independent director</td><td>Wang, Wen-Tsung</td></tr>
<tr><td>Independent director</td><td>Chang,Yuan-Lung</td></tr>
<tr><td colspan="23">1. The correlation between the policies, standards, and structure of the remuneration and the responsibilities, risk and time undertook by the Independent Director:
The Company pays independent directors a monthly remuneration of NT$ 30,000, and no directors' remuneration will be distributed from the profit of a year.
2. In addition to the disclosure in the above table, in the most recent fiscal year, the compensation received by Directors from all companies included in the financial statements for service rendered (e.g. in the capacity of non-Employee consultant): None.</td></tr>
</table>

Note1: The institutional director, Itochu Corporation, transferred more than half of the shares held when being elected during its term of office. Therefore the Company announced its natural discharge on February 20, 2020.
Note 2: On June 12, 2020, all the directors were re-elected. The elected director, Chan Sing Investment Co., Ltd appointed the representative: Huang, Chao-Hui.
Note 3: On June 12, 2020, all the directors were re-elected. The elected director, Cheng Jade Enterprise Co., Ltd., replaced the representative Ho, Chi-Chao with Ho, Eugene Lawrence on July 14, 2020.

Remuneration range of directors (independent Directors included)

Range of remuneration paid to each director	Name of director			
	Sum of the first 4 items (A+B+C+D)		Sum of the first 7 items (A+B+C+D+E+F+G)	
	The Company	All consolidated companies (I)	The Company	All consolidated companies (J)
Less than NTD$1,000,000	Ho, Chi-Cheng, Itochu Corporation, Ho, Chi-Chao, Huang, Chao-Hui, Ho, Eugene Lawrence, Ho, Chi-Chou, Cheng, Chih-Fa, Lai, Ching-Yuan, Hsu, I-Ping, Wang, Wen-Tsung, Chang,Yuan-Lung	Ho, Chi-Cheng, Itochu Corporation, Ho, Chi-Chao, Huang, Chao-Hui, Ho, Eugene Lawrence, Ho, Chi-Chou, Cheng, Chih-Fa, Lai, Ching-Yuan, Hsu, I-Ping, Wang, Wen-Tsung, Chang,Yuan-Lung	Itochu Corporation, Ho, Chi-Chao, Ho, Eugene Lawrence, Ho, Chi-Chou, Cheng, Chih-Fa, Lai, Ching-Yuan, Hsu, I-Ping, Wang, Wen-Tsung, Chang,Yuan-Lung	Itochu Corporation, Ho, Chi-Chou, Cheng, Chih-Fa, Hsu, I-Ping, Wang, Wen-Tsung, Chang,Yuan-Lung
NTD$1,000,000 (including) to NTD$2,000,000 (excluding)	-	-	Huang, Chao-Hui	
NTD$2,000,000 (including) to NTD$3,500,000 (excluding)	-	-		Ho, Chi-Chao, Huang, Chao-Hui, Lai, Ching-Yuan, Ho, Eugene Lawrence
NTD$3,500,000 (including) to NTD$5,000,000 (excluding)	-	-	Ho, Chi-Cheng	
NTD$5,000,000 (including) to NTD$10,000,000 (excluding)	-	-	-	Ho, Chi-Cheng
NTD$10,000,000 (including) to NTD$15,000,000 (excluding)	-	-	-	-
NTD$15,000,000 (including) to NTD$30,000,000 (excluding)	-	-	-	-
NTD$30,000,000 (including) to NTD$50,000,000 (excluding)	-	-	-	-
NTD$50,000,000 (including) to NTD$100,000,000 (excluding)	-	-	-	-
More than NTD$100,000,000	-	-	-	-
Total	11	9	9	9

(II) Supervisor's Remuneration: None (the supervisor is replaced by the Audit Committee in the Company)

(III) Remunerations of General Manager and Deputy General Manager

<table>
<tr><td colspan="15" align="right">2020 Unit: NT$thousand</td></tr>
<tr><td rowspan="3">Position</td><td rowspan="3">Name</td><td colspan="2">Salary (A)</td><td colspan="2">Pension (B)</td><td colspan="2">Bonuses and Special Allowance etc. (C)</td><td colspan="4">Employee Earnings Distribution (D)</td><td colspan="2">Sum of A, B, C and D as a percentage of after-tax profit (%)</td><td rowspan="3">Compensation from Affiliates Other than Subsidiaries</td></tr>
<tr><td rowspan="2">The Company</td><td rowspan="2">All companies included in the financial statements</td><td rowspan="2">The Company</td><td rowspan="2">All companies included in the financial statements</td><td rowspan="2">The Company</td><td rowspan="2">All companies included in the financial statements</td><td colspan="2">The Company</td><td colspan="2">All companies included in the financial statements</td><td rowspan="2">The Company</td><td rowspan="2">All companies included in the financial statements</td></tr>
<tr><td>Cash Amount</td><td>Stock Amount</td><td>Cash Amount</td><td>Stock Amount</td></tr>
<tr><td>General Manager</td><td>Huang, Chao-Hui (Note 2)</td><td rowspan="2">4,491</td><td rowspan="2">4,617</td><td rowspan="2">223</td><td rowspan="2">223</td><td rowspan="2">1,571</td><td rowspan="2">1,749</td><td rowspan="2">600</td><td rowspan="2">-</td><td rowspan="2">600</td><td rowspan="2">-</td><td rowspan="2">4.44%</td><td rowspan="2">4.34%</td><td rowspan="2">None.</td></tr>
<tr><td>Chief Finance Officer</td><td>Weng, Chih-Hsien</td></tr>
</table>

Note 1: The rent for the General Manager's car was paid NT$629 thousand; the rent for the CFO's car was paid NT$486 thousand

Note 2: The actual severance pay and pension paid in 2019 was NT$0; the expensed contribution of severance pay and pension was NT$273 thousand.

Unit: NT$ (thousand)

Remuneration Range of General Manager and Deputy General Manager

Range of Remuneration Paid to General Manager and Deputy General Managers	Names of General Manager and Deputy General Managers	
	The Company	All companies included in the financial statements
Less than NTD$1,000,000	–	–
NTD$1,000,000 (including) to NTD$2,000,000 (excluding)	–	–
NTD$2,000,000 (including) to NTD$3,500,000 (excluding)	Weng, Chih-Hsien	Weng, Chih-Hsien
NTD$3,500,000 (including) to NTD$5,000,000 (excluding)	Huang, Chao-Hui	Huang, Chao-Hui
NTD$5,000,000 (including) to NTD$10,000,000 (excluding)	–	–
NTD$10,000,000 (including) to NTD$15,000,000 (excluding)	–	–
NTD$15,000,000 (including) to NTD$30,000,000 (excluding)	–	–
NTD$30,000,000 (including) to NTD$50,000,000 (excluding)	–	–
NTD$50,000,000 (including) to NTD$100,000,000 (excluding)	–	–
More than NTD$100,000,000	–	–
Total	2	2

(IV) Names of Managerial Officers Receiving Employee Remuneration and the Distribution

Unit: NT$ thousand

Item	Position	Name	Stock amount	Cash amount	Total	Total as a percentage of after-tax profit (%)
Managerial officer	General Manager	Huang, Chao-Hui	0	600	600	0.49%
	Chief Finance Officer	Weng, Chih-Hsien				

Note 1: The proposal of 2020 profit distribution was approved by the Board of Directors on February 26, 2021, but not ratified by the AGM; the intended distribution was calculated based proportionally based on the distributed amount of the previous year. The distribution has not been made as of the publication date of the annual report.

(V) Compare and describe the percentage of the total remuneration paid by the Company and by all companies included in the consolidated or parent company-only or individual financial statements for the two most recent fiscal years to Directors, Supervisors, General Manager, and Deputy General Managers of the Company, relative to net profit after tax, and the correlation between policies, standards, and portfolios for the payment of remuneration, the procedures for determining remuneration, and business performance and future risks.

1. The proportion of the total remuneration of Directors, Supervisors, General Manager and Deputy General Managers of the Company paid by the Company and all companies in the consolidated financial statement to net profit after tax in individual financial statements in the most recent two years:

Related item	2019		2020	
	The Company	Consolidated financial statement	The Company	Consolidated financial statement
Net income after tax	128,016	153,067	155,164	165,645
Percentage of directors' remunerations	5.24%	12.58%	5.42%	13.26%
Percentage of supervisors' remunerations	0	0	0	0
Percentage of general manager and deputy general managers' remunerations	4.96%	4.74%	4.44%	4.34%

Description: The Company and subsidiaries' margin increased and interest cost decreased in 2020, so the 2020 net income after tax increased; the directors' and managers remuneration increase in 2020 from 2019, and thus the ratio increased from the previous year.

2. The remuneration policies, standards, and portfolios for the payment of remuneration, the procedures for determining remuneration, and the correlation of remuneration to business performance and future risks:

(1) The policy for the paying directors (including independent directors) is specified in the Company's Articles of Incorporation and submitted to the shareholders' meeting for resolution and approval.

(2) The Company has the Remuneration Committee in place, which formulates and regularly reviews directors', independent directors' and managerial officers' annual and long-term performance appraisals and remuneration policies, systems and structures.

IV. Implementation of Corporate Governance

(I) Operation of Board of Directors

2020 and 2021 up to the date of publication of the annual report, 11 meetings were held by the Board of Directors. The attendance of directors was as follows:

Position	Name	Attendance in Person	By proxy	Actual attendance rate	Remarks
Chairman	Ho, Chi-Cheng (Note 1)	11	0	100.00%	Should attend 11 meetings
Director	Chang Sing Investment Co., Ltd. Representative: Ho, Chi-Chao (Note 2)	3	0	100.00%	Should attend 3 meetings
Director	Chang Sing Investment Co., Ltd. Representative: Huang, Chao-Hui (Note 3)	7	0	100.00%	Should attend 7 meetings
Director	Chang Sing Investment Co., Ltd. Representative: Chiu, Hsien Tung (Note 4)	1	0	100.00%	Should attend 1 meeting
Director	Cheng Jade Enterprise Co., Ltd. Representative: Ho, Chi-Chao (Note 5)	1	0	100.00%	Should attend 1 meeting
Director	Cheng Jade Enterprise Co., Ltd. Representative: Ho, Eugene Lawrence (Note 6)	7	0	100.00%	Should attend 7 meetings
Director	Ho, Chi-Chou (Note 1)	11	0	100.00%	Should attend 11 meetings
Director	Cheng, Chih-Fa (Note 1)	11	0	100.00%	Should attend 11 meetings
Director	Lai, Ching-Yuan (Note 1)	11	0	100.00%	Should attend 11 meetings
Independent director	Hsu, I-Ping (Note 1)	11	0	100.00%	Should attend 11 meetings
Independent director	Wang, Wen-Tsung (Note 1)	11	0	100.00%	Should attend 11 meetings
Independent director	Chang,Yuan-Lung (Note 1)	11	0	100.00%	Should attend 11 meetings

Note 1: After the term of office as director expired on June 12, 2020, the office was continued after re-election.
Note 2: The full re-election was taken on June 12, 2020 as the directors' term of office expired. Afterwards, the institutional director replaced the representative, and the previous representative was discharged.
Note 3: The full re-election was taken on June 12, 2020 as the directors' term of office expired. Afterwards, the institutional director replaced the representative, and the representative took office; on April 1, 2021, the representative was replaced and thus discharged.
Note 4: On April 1, 2021, the institutional director replaced the representative, and the representative took office;
Note 5: The full re-election was taken on June 12, 2020 as the directors' term of office expired. He took office after the re-election, and was discharged on July 14, 2020 as the representative was replaced.
Note 6: On July 14, 2020, the institutional director replaced the representative, and the representative took office;

Other notes:

1. For Board of Directors meetings that meet any of the following descriptions, state the date, session, the discussed topics, Independent Directors' opinions and how the company has responded to such opinions:

(1) Conditions described in Article 14-3 of the Securities and Exchange Act:

Board of Directors	elected	Content of resolution	Response of the Company toward the opinion of Independent Directors
9th Term 16th Meeting	March 18, 2020	● Approved items by the Remuneration Committee ● Proposal of appropriating of employee remuneration and Directors' and Supervisors' remuneration for 2019. ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets." ● Proposal of amending procedures related to corporate governance	Independent directors had no other opinions.
9th Term 17th Meeting	March 18, 2020	● Implementation of transferring the repurchased shares to employees for the first time	
9th Term 18th Meeting	May 6, 2020	● Proposal of amending the Approval Authority Chart ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets."	
10th Term First meeting	June 12, 2020	● Proposal to elect the 10th term of the Company's chairman	
10th Term Second meeting	August 5, 2020	● Appointment of members of the Remuneration Committee under the 10th Term of the Board of Directors	
10th Term 3rd meeting	August 5, 2020	● Approved items by the Remuneration Committee	
10th Term 4th meeting	November 6, 2020	● Proposal to participate in the capital increase in cash by Heng I Chemical Co., Ltd. ● The Company conducted new share issuance for a capital increase in cash ● Amendment to some clauses of the "Rules of Procedure for Shareholder Meetings" ● The Company's invested subsidiary loaning of the fund to a sub-subsidiary	

Board of Directors	elected	Content of resolution	Response of the Company toward the opinion of Independent Directors
		● Amendment to the “Regulations Governing Procedure for Board of Directors Meetings” ● Intention to amend the “Code of Ethical conduct” ● Amendment to the “Audit Committee Charter” ● Amendment to the “Rules Governing the Scope of Powers of Independent Directors”	Independent directors had no other opinions.
10th Term Fifth meeting	November 16. 2020	● Proposal to renewal the land leasing from the subsidiary, Heng I Chemical Co., Ltd., for the P6L3 Nickel(II) sulfate production line ● The Company disposes the right-of-use asset of P6L1 to Uranus Chemicals Co., Ltd.	
10th Term Sixth meeting	December 23, 2020	● Approved items by the Remuneration Committee ● Determination of the issuance price for a capital increase in cash for 2020 and other related matters ● Proposal of amending the Approval Authority Chart ● Evaluation of the independence and suitability of the appointed CPAs from KPMG Taiwan	
10th Term 7th Meeting	February 26, 2021	● Amount of endorsement/guaranteed provided to subsidiaries ● The Company endorses/guarantees the subsidiary’s application of credit limit from the bank ● Loaning of funds among sub-subsidiaries	
10th Term 8th Meeting	May 4, 2021	● Approved items by the Remuneration Committee ● Reappointment of general manager and accounting officer, appointment of manufacturing and R&D officers ● Proposal to relieve managerial officers from non-competition restriction ● Proposal to participate in the capital increase in cash by Uranus Chemicals Co., Ltd. ● The Company’s invested subsidiary loaning of fund	

(2) Any other documented objections or qualified opinions raised by independent directors against board resolutions in relation to matters other than those described above: None

2. For the implementation and state of directors' recusal for conflicts of interests, the directors' name, the topic discussed, reasons for the required recusal, and participation in the voting process:

Board of Directors	elected	Content of resolution	Recused Director	Reason of recusal and voting status
9th Term 11th time	March 18, 2020	Discussion of appropriation of employee remunerations for 2019, and the promotion and remunerations of managerial officers for 2020. Proposal of distributing employee remuneration and directors' remuneration for 2019.	Chairman Ho, Chi-Cheng	The Chairman concurrently serves as a managerial officer, so he recused himself from the discussion and voting. The independent director, Hsu, I-Ping, chaired the meeting.
10th Term 3rd meeting	August 5, 2020	2020 managerial officers' remuneration adjustment, 2019 distributing employee remuneration.	Chairman Ho, Chi-Cheng Director Huang, Chao-Hui	The Chairman, Ho, Chi-Cheng and Director, Huang, Chao-Hui concurrently serve as managerial officers, so they recused themselves from the discussion and voting. The independent director, Wang, Wen-Tsung, chaired the meeting.
10th Term Sixth meeting	December 23, 2020	2020 disbursement of year-end bonus to managerial officers; appropriation of employee remuneration; managerial officers' subscription for a capital increase in cash.	Chairman Ho, Chi-Cheng Director Huang, Chao-Hui	The Chairman, Ho, Chi-Cheng and Director, Huang, Chao-Hui concurrently serve as managerial officers, so they recused themselves from the discussion and voting. The independent director, Wang, Wen-Tsung, chaired the meeting.
10th Term 7th Meeting	Febuary 26, 2020	Proposal of distributing employee remuneration and directors' remuneration for 2020.	Chairman Ho, Chi-Cheng Director Huang, Chao-Hui	The Chairman, Ho, Chi-Cheng and Director, Huang, Chao-Hui concurrently serve as managerial officers, so they recused themselves from the discussion and voting. The independent director, Wang, Wen-Tsung, chaired the meeting.
10th Term 8th Meeting	May 4, 2021	Discussion of managerial officers' remunerations; Reappointment of Managerial Officers; Proposal to relieve managerial officers from non-competition restriction	Chairman Ho, Chi-Cheng Director Ho, Eugene Lawrence	The Chairman, Ho, Chi-Cheng and Director, Ho, Eugene Lawrence concurrently serve as managerial officers, so they recused themselves from the discussion and voting. The independent director, Wang, Wen-Tsung, chaired the meeting.

3.TWSE/TPEx listed company shall disclose the assessment cycle and period, the scope of assessment, method and content of assessment for the self (or peer) appraisal of the

Board of Directors, and list the following implementation of the Board of Director's appraisal:

Frequency of assessment	Assessment period	Scope of assessment	Method of assessment	Content of assessment
Once a year	January 1, 2020 to December 31, 2020	Performance appraisal of the overall Board of Directors, individual board member, and functional committee	1. Overall Board of Directors: internal self-assessment in the Board of Directors 2. Individual board member: self-assessment by director 3. Functional committee: internal self-assessment in the Board of Directors	1. Assessment of the Board of Directors' performance: including the degree of participation in the company's operations; improvement in the quality of decision making by the board of directors; the composition and structure of the board of directors; the election of the directors and their continuing professional education; internal control. 2. Assessment of individual board member: at least including: grasp of the company's goals and missions; recognition of director's duties; degree of participation in the company's operations; management of internal relationships and communication; professionalism and continuing professional education; internal control. 3. Assessment of functional committee: degree of participation in the company's operations; recognition of the duties of the functional committee; improvement in the quality of decision making by the functional committee; composition of the functional committee, and election and appointment of committee members; internal control.
Implementation: During the assessment period, the outcomes of self-assessment for the overall Board of Directors, individual board member, and functional committee were with good performance				

4. Objective of enhancing functions of the Board of Directors

(1) Establishment of Remuneration and Audit Committees

The company has established the Remuneration Committee in 2011, and established the Audit Committee in the shareholders' meeting of 2017 to strengthen the Board of Directors to perform its duties.

(2)Report on Corporate Governance

For the health functions of the Board of Directors and corporate governance, the Company has established the "Regulations Governing Procedure for Board of Directors Meetings," "Procedures for Election of Directors," "Ethical Corporate Management Best Practice Principles," "Procedures for Ethical Management and Guidelines for Conduct," "Code of Ethical Conduct," "Corporate Governance Best-Practice Principles," "Procedures of Self- or Peer Assessment for the Board of Directors' Appraisal," and "Managerial Procedures for Prevention of Insider Trading," as the basis of compliance.

(II) Operations of the audit committee or the state of participation in board meetings by the supervisors:

2020 and 2021 up to the date of publication of the annual report, Eight meetings were held by the Audit Committee. The attendance of members was as follows:

Position	Name	Attendance in Person	By proxy	Actual attendance rate	Remarks
Independent director	Wang, Wen-Tsung	8	0	100.00%	Should attend 8 meetings
Independent director	Hsu, I-Ping	8	0	100.00%	Should attend 8meetings
Independent director	Chang,Yuan-Lung	8	0	100.00%	Should attend 8 meetings

Note: After the term of office as director expired on June 12, 2020, all members of the Audit Committee continued their offices after re-election.

Other notes:

1. For Audit Committee meetings that meet any of the following descriptions, state the date, session, the discussed topics, independent directors' opinions, and how the company has responded to such opinions:

(1) Conditions described in Article 14-5 of the Securities and Exchange Act:

Board of Directors	elected	Content of resolution	Response of the Company toward the opinion of Independent Directors
1st Term 15th Meeting	March 18, 2020	● 2019 assessment for the effectiveness of the internal control system, and the Statement of Internal Control System. ● 2019 business and financial reports, parent company-only financial statements and consolidated financial statements. ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets."	Audit Committee members had no other opinions.

Board of Directors	elected	Content of resolution	Response of the Company toward the opinion of Independent Directors
		● Proposal of amending procedures related to corporate governance ● The Company provides endorsements/guarantees to subsidiary ● The Company's subsidiary loaning of fund to a sub-subsidiary ● Loaning of funds among sub-subsidiaries ● Loaning of funds among sub-subsidiaries	Audit Committee members had no other opinions.
1st Term 16th Meeting	May 6, 2020	● Approved the consolidated financial statements for 2020 Q1. ● Proposal of amending the Approval Authority Chart ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets."	
2nd Term 1st meeting	August 15, 2020	● Consolidated financial reports for 2020 Q2.	
2nd Term 2nd meeting	November 6, 2020	● Consolidated financial reports for 2020 Q3. ● Participation of the subsidiary's capital increase in cash. ● The Company conducted new share issuance for a capital increase in cash in 2020 ● The Company's subsidiary loaning of fund to a sub-subsidiary ● Amendment to "Code of Ethical conduct" ● Amendment to the Audit Committee Charter	
2nd Term 3rd meeting	November 16, 2020	● Proposal to renewal the land leasing from the subsidiary, Heng I Chemical. ● Disposal of right-of-use asset to the subsidiary, Uranus Chemicals.	
2nd Term 4th meeting	December 23, 2020	● Determination of the issuance price for a capital increase in cash for 2020 and other related matters ● Proposal of amending the Approval Authority Chart ● Assessment of the independence and suitability of the appointed CPAs.	
2nd Term 5th meeting	February 6, 2021	● 2020 assessment for the effectiveness of the internal control system, and the Statement of Internal Control System. ● 2020 business and financial reports, parent company-only financial statements and consolidated financial statements. ● The Company provides endorsements/guarantees to subsidiary ● Loaning of funds among sub-subsidiaries	

Board of Directors	elected	Content of resolution	Response of the Company toward the opinion of Independent Directors
2nd Term Sixth meeting	May 4, 2021	● Consolidated financial reports for 2021 Q1. ● Participation of the subsidiary’s capital increase in cash. ● The Company’s invested subsidiary loaning of fund. ● Reappointment of the accounting officer	Audit Committee members had no other opinions.

(2) Other resolution that has not been passed by the Audit Committee but passed by two-thirds or more of all Directors: none

2. Recusal of any independent director due to conflict of interest: None

3. Method of communication between Independent Directors, the Internal Audit Supervisor, and CPA:

(1) The audit officer of the Company participates in the Audit Committee meetings, regularly reports the implementation and improvement of the audit plan, and communicates on the effectiveness of the implementation of the Company's internal control system; the interaction is good.

(2) The independent directors of the Company interacted well with CPAs, and communicate well with CPAs in terms of reviewing financial and business issues.

(III) Corporate Governance Implementation and Deviations from the "Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies"

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
I. Has the company established and disclosed its corporate governance principles based on the "Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies?"	✓		The Company has established the "Corporate Governance Best-Practice Principles" pursuant to the "Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies." The Company and subsidiaries all operate accordingly.	No material deviation
II. Shareholding structure and shareholders' interests (I) Has the Company implemented a set of internal procedures to handle Shareholders' recommendations, queries, disputes, and litigations?	✓		The Company has the "Managerial Procedures for Stock Affairs Operation," with the stock affair agency, Stock Affair Agency Department of Grand Fortune Securities, to take care of affairs of shareholders.	No material deviation
(II) Is the Company constantly informed of the identities of its major Shareholders and the ultimate controller?	✓		The Company and the stock affair agency, Stock Affair Agency Department of Grand Fortune Securities, grasp the lists of the major shareholders and their ultimate controllers.	No material deviation
(III) Has the Company established and implemented risk management practices and firewalls for its affiliated companies?	✓		The company's affiliates are the subsidiaries. The related party transactions, endorsement/guarantees, and loaning of funds all comply with the operational procedures. In addition, the Company regularly supervises and manages subsidiaries to implement risk control and firewall mechanism.	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
(IV) Has the Company established internal policies that prevent insiders from trading securities against non-public information?	✓		The Company has established the Managerial Procedures for Prevention of Insider Trading and operates accordingly; there has no material deviation.	No material deviation
III. Composition and responsibilities of the Board of Directors (I) Has the Board established and implemented policies to ensure the diversity of its members?	✓		Members of the Board of Directors come from various industries and possess various professional knowledge, meeting the requirements of diversity.	No material deviation
(II) Apart from the Remuneration Committee and Audit Committee, has the Company assembled other functional committees at its own discretion?		✓	The Company has set up the Remuneration Committee and Audit Committee, but has not yet set up other functional committees. In the future, it will be reassessed based on the Company's operational needs.	No material deviation
(III) Has the Company established a set of policies and assessment methodology to evaluate the performance of the Board? Is regular performance evaluation conducted, at least once a year, and the evaluation result is submitted to the Board to serve as a reference in determining the remuneration of individual Directors and a nomination for re-election?	✓		On March 15, 2019, the Board of Directors approved to establish the "Procedures of Assessing the Board of Directors' Performance," and the assessment started on January 1, 2020 pursuant to the regulations. The scope of its assessment includes the performance assessment of the overall Board of Directors, individual directors and functional committees; the method of assessment is internal self-assessment of the Board, self-assessment of directors, peer assessment, retaining of external professional institutions, experts or other appropriate methods for performance assessment .	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
			The overall performance assessment of the Board of Directors covers the following five aspects: 1. Participation level in the management of the Company. 2. Improvement in the quality of decision making by the board of directors. 3. Composition and structure of the Board of Directors. 4. Appointment of Director and continued education. 5. Internal control. The (self or peer) performance assessment of board members covers the following six aspects: 1. Their grasp of the company's goals and missions. 2. Their recognition of director's duties. 3. Their degree of participation in the company's operations. 4. Their management of internal relationships and communication. 5. Their professionalism and continuing professional education. 6. Internal control. The overall performance assessment of the functional committees covers the following five aspects: 1. Their degree of participation in the company's operations. 2. Comprehension of the responsibilities of the functional committee. 3. Improvement in the quality of decision making by the functional committee.	

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
			4. Composition of functional committee and appointment of members. 5. Internal control. The Company selects appropriate assessment execution units, and each execution unit collects relevant information about Board activities and distributes relevant self-assessment questionnaires. Finally, the coordinating execution unit collects the questionnaires in a unified manner and records the assessment results report based on the scoring standards of the indicators in the aforesaid methods. The results are reported to the Board of Directors for review and improvement.	
(IV) Does the Company assess the independence of external auditors regularly?	✓		The independence of CPAs is assessed at least once per year.	No material deviation
IV. Does the TWSE/TPEx listed company dedicate competent managers or a sufficient number of managers to take charge of corporate governance, and designate supervisors thereof to oversee the corporate governance affairs (including but not limited to providing information required for director/supervisor's operations, assisting the Board and Supervisors in legal compliance, convening Board/Shareholders' meetings in accordance with the law, applying for/changing	✓		The Company as assigned the finance/accounting unit as the corporate governance unit.	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
company registry, and producing meeting minutes of Board/Shareholders' meetings)?				
V. Has the Company established a means of communicating with its stakeholders (including but not limited to Shareholders, Employees, customers, suppliers, et cetera) or created a stakeholder section on the Company website? Does the Company respond to stakeholders' questions on corporate responsibilities?	✓		(1) The Company maintains open communication channels with banks and other creditors, employees, consumers, suppliers, communities, or company stakeholders, and respects and safeguards their legitimate rights and interests. (2) Stakeholders may instantly learn about the Company's operating information through MOPS. (3) The Company has the spokesperson and deputy spokesperson as communication channels with stakeholders.	No material deviation
VI. Does the Company appoint a professional stock transfer agent to handle the affairs of the shareholders' meeting?	✓		The Company has retained the Stock Affair Agency Department of Grand Fortune Securities as the stock affair agency	No material deviation
VII. Information Disclosure (I) Has the company established a website that discloses financial, business, and corporate governance-related information?	✓		The Company has set up a company website to disclose finance and business and corporate governance information. In addition, it has also disclosed relevant information in MOPS pursuant to the law.	No material deviation
(II) Does the Company adopt other avenues for information disclosure (e.g. setting up an English website, designating specific personnel to collect and provide disclosure on the Company, implementing a spokesperson system, disclosing the process of	✓		In order to ensure that information that may affect the decision-making of shareholders and stakeholders may be disclosed in a timely and fair manner, the responsible units collect and release various information. The relevant reporting operations are conducted at MOPS, and the implementation of the spokesperson system has been	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
institutional investor conferences on the Company website and et cetera)?			enhanced.	
(III) Does the Company publicly announce and file the annual financial reports within two months after the accounting year-end, and publicly announce and file the first, second and third quarterly financial reports and monthly operating status reports before the stipulated deadlines?	✓		The Company publicly announces and files, as required, the annual financial reports within two months after the accounting year-end, and publicly announces and files the first, second and third quarterly financial reports and monthly operating status reports before the stipulated deadlines.	No material deviation
VIII. Does the Company have other important information for better understanding the Company's corporate governance system (including but not limited to interests and rights of Employees, care for Employees, investor relations, relations with suppliers, relations with stakeholders, continuing education of directors and supervisors, execution of risk management policies and risk measuring standards, execution of customer policies, liability insurance for the Company's directors and supervisors)?	✓		The board members have taken the continuing education courses pursuant to the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx Listed Companies." The Company disclosed the information related to the operation on MOPS, and the various information is available on the website.	No material deviation
IX. Please describe improvements that have been made about the results of the corporate governance evaluation as prescribed by the Taiwan Stock Exchange Corporate Governance Center, as well as priorities and measures for matters that have yet to be improved. (The companies not subject to the evaluation need to to fill in this part) For the the 2020 Corporate Governance Evaluation, the Company was ranked at the first 66%~80% group, and strive to better meet the corporate governance requirements..				

(IV)If the Company has established the Remuneration Committee, its composition, responsibilities, and operation should be disclosed:

1. Professional Qualifications and Independence Analysis of Remuneration Committee Members

Title (Note 1)	Criteria Name	Having met one of the following professional qualifications, together with at least five years of work experience			Independence Criteria (Note 2)										Number of Other Public Companies in which the Individual is Concurrently Serving as a Remuneration Committee Member	Remarks
		An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the company in a public or private junior college, college or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialists who have passed a national examination and been awarded a certificate in a profession necessary for the business of the company	Having work experience in the areas of commerce, law, finance, or accounting, or otherwise necessary for the business of the company	1	2	3	4	5	6	7	8	9	10		
Independent director	Hsu, I-Ping			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	None
Independent director	Wang, Wen-Tsung		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1	None
Independent director	Chang, Yuan-Lung		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2	None

Note 1: For the title, please indicate the position as Director, Independent Director, or others.

Note 2: Member who meets the following conditions two years before the appointment or during the term of appointment, indicate with "✓" at the corresponding boxes below.

(1) Not an employee of the Company or any of its affiliates.

(2) Not a director or supervisor of the Company or any of its affiliates. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)

(3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of issued shares of the Company or ranks as one of its top ten shareholders.

(4) Not a managerial officer mentioned in paragraph (1), or a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship mentioned in paragraphs (2) and (3).

(5) Not a director, supervisor, or employee of an institutional shareholder that directly holds 5% or more of the total number of issued shares of the Company, or ranks as its top five shareholders, or the designated representative pursuant to Article 27 Section 1 or 2 in the Company as director/supervisor. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)

(6) Not a director, supervisor, or employee of other companies with the Board seats or more than half of the voting shares under the control of one person. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary.)

(7) Not a Director, General Manager or Employee of other company whose Chairperson or general manager are the

same person or spouse of the Company. (The same does not apply, however, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary).

(8) Not a director, supervisor, managerial officer, or shareholder holding 5% or more of the shares of a specified company or institution with a financial or business relationship with the company. (The same does not apply, however, if specified company or institution possessing shareholdings of more than 20% and less than 50% of the total number of issued shares of the Company, and in cases where the person is an independent director of the company, its parent company, or any subsidiary, or subsidiary of the same parent company as appointed in accordance with the laws of Taiwan or with the laws of the country of the parent company or subsidiary).

(9) Not a professional individual who, or an owner, partner, director, supervisor, or managerial officer of a sole proprietorship, partnership, company, or institution that provides auditing services or for the past two years, has provided commercial, legal, financial, accounting services or consultation amounted to less than a cumulative NTD500,000 to the Company or any affiliate of the company, or a spouse thereof. However, this does not apply to members of the Compensation Committee, Public Tender Offer Review Committee or Special Merger and Acquisition Committee carrying out their duties in accordance with the Securities and Exchange Act or Business Mergers and Acquisitions Act.

(10) Does not meet any of the criteria described in Article 30 of the Company Act.

2. Operation of Remuneration Committee

(1) The total number of members in the Remuneration Committee amounts to three persons.

(2) The term of office for the current members: June 12, 2020 to June 11, 2023. 2020 and 2021 up to the publication date of the annual report, a total of four meetings were held by the Remuneration Committed. The attendance is as the following:

Position	Name	Attendance in person Times	Attendance by proxy Times	Actual attendance rate	Remarks
Committee member	Hsu, I-Ping	4	0	100.00%	Should attend 4 meetings
Committee member	Wang, Wen-Tsung	4	0	100.00%	Should attend 4 meetings
Committee member	Chang,Yuan-Lung	4	0	100.00%	Should attend 4 meetings

Note: After the term of office as director expired on June 12, 2020, all members of the Remuneration Committee continued their offices after re-election.

Other notes:

(1) If the Board of Directors declines to adopt or modify a recommendation of the remuneration committee, it should specify the date of the meeting, the session, the nature of motion, the resolution made by the Board of Directors, and the Company’s response to the remuneration committee’s opinion (e.g., if the amount of remuneration passed by the Board of Directors has a discrepancy with the recommended amount by the Remuneration Committee, the circumstances and cause for the difference shall be specified): None.

(2) If resolutions of the Remuneration Committee are objected to by members or become subjected to a qualified opinion, which has been recorded or declared in writing, then the date of the meeting, the session, the nature of the motion, all members' opinions, and the response to members' opinions should be specified: None.

(V) The state of the company's performance of social responsibilities, any deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies:

Assessment criteria	Actual governance			Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
I. Implementation of corporate governance (I) Has the Company performed risk assessment pertaining to the environment, community and corporate governance issues related to the operation of the Company in accordance with the materiality principle, and established the corresponding risk management policies or strategies?	✓		The Board of Directors has approved the “Corporate Social Responsibility Best Practice Principles.” The performance of implementation of such, please refer to the CSR Report (available on the Company’s website).	No material deviation
II. Does the company have a unit that specializes (or is involved) in CSR practices? Is the CSR unit run by senior management and report its progress to the Board of Directors?	✓		The Company has assigned the dedicated staff to be in charge of various CSR programs promotion and establishing CSR policies.	No material deviation
III. Environmental Issues (I) Does the company have an appropriate environmental management system established in accordance with its industrial character?	✓		The Company has obtained ISO 14001 Environmental Management certification, with the environmental quality policy in place.	No material deviation
(II) Is the company committed to enhance the	✓		The Company implements garbage classification and reduction and implements the	No material deviation

<table>
<tr><th rowspan="2">Assessment criteria</th><th colspan="3">Actual governance</th><th rowspan="2">Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary description</th></tr>
<tr><td>utilization efficiency of resources and use renewable materials that are with low impact on the environment?</td><td></td><td></td><td>policy of resource recycling and reuse. Sewage and waste liquid are processed in a centralized manner. After the metal components are extracted, they are treated to the discharging standard before discharging to the sewage treatment center of the industrial park to minimize the damage to the environment.</td><td></td></tr>
<tr><td>(III) Has the company assessed the potential risks and opportunities for business operations now and in the future regarding climate change and will it adopt response measures relating to climate issues?</td><td>✓</td><td></td><td>The Company has assessed the potential risks and opportunities of climate change to the Company in the present and the future by referring to relevant climate change information and the TCFD framework. Through the "CSR editorial team" at the meeting, the discussion and risk identifications are undertaken based on the Company's product characteristics, the transformation risks, and physical risks and opportunities, and the short-, medium- and long-term climate change risks and opportunities are identified based on the impact on the Company operations and likelihood.
After assessment, the Company's potential climate-related risks and opportunities are:
Physical risk: long-term
Increase in extreme climate events: drought leading to water shortage risk:
<table>
<tr><th>Water shortage simulation</th><th>Financial impact</th><th>Responding strategy</th></tr>
<tr><td>Long drought without rain, water outage for a week</td><td>No impact</td><td>The Company currently has a water storage facility with a capacity of 500 m^3, which is</td></tr>
</table></td><td>No material deviation</td></tr>
</table>

<table>
<tr><th rowspan="2">Assessment criteria</th><th colspan="3">Actual governance</th><th rowspan="2">Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary description</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td></td><td></td><td>enough to supply the known water consumption for a week after the water is cut off.</td></tr>
<tr><td>Long drought without rain, water outage for one to two weeks</td><td>Manufacturing costs increase
Revenue declines</td><td>1. Arrange water trucks to send water
2. Revise down output</td></tr>
<tr><td>Water outage for more than three weeks</td><td>Fixed assets increase
Revenue declines</td><td>Build sewage recycling and treatment equipment to reduce the dependence on tap water.</td></tr>
</table>
</td><td></td></tr>
<tr><td>(IV) Has the company calculated the greenhouse gas emissions, water consumption, and total weight of waste in the past 2 years. It formulated policies on energy conservation and carbon reduction, greenhouse gas reduction, water consumption, or other waste management?</td><td>✓</td><td></td><td>◎GHG emission volume
In order to fulfill global citizenship and corporate social responsibility, the Company is committed to promoting energy saving and carbon reduction. In order to enhance the management of greenhouse gases, the ISO 14064-1 greenhouse gas inventory standard was introduced in 2019, and the verification statement was obtained. The Company's main energy sources are gasoline, diesel, liquefied petroleum gas, heavy oil, purchased steam and electricity, of which the purchased steam takes the highest proportion. The greenhouse gas emissions in the past two years are shown in the following table:
<table>
<tr><th>Category</th><th>Unit</th><th>2019</th><th>2020</th></tr>
<tr><td>Gasoline</td><td>Tons CO2e</td><td>10.40</td><td>14.15</td></tr>
<tr><td>Diesel</td><td>Tons CO2e</td><td>55.33</td><td>39.77</td></tr>
<tr><td>LPG</td><td>Tons CO2e</td><td>96.15</td><td>88.99</td></tr>
<tr><td>Heavy oil</td><td>Tons CO2e</td><td>6,632.96</td><td>3,338.26</td></tr>
</table>
</td><td>No material deviation</td></tr>
</table>

Assessment criteria	Actual governance			Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
			(see below)	

Purchased steam	Tons CO2e	3,675.21	3,706.46
Electricity	Tons CO2e	5,089.76	4,467.48
Scope 1	Tons CO2e	6,794.84	3,481.16
Scope 2	Tons CO2e	8,764.97	8,173.94
Total emission= Scope 1 + Scope 2	Tons CO2e	15,559.81	11,655.1
Parent company only revenue	NT$ thousand	4,648,931	3,592,984
GHG emission intensity (total emission/parent company only revenue)	Tons CO2e/NT$ thousand	0.0033	0.0032

◎Water usage

Water resource management plays a key role in the Company's sustainable operation. It promoted the ISO14046 water footprint of products in 2019, and passed the verification in October of the same year. The Company actively conducts water consumption surveys, improvement assessments and water-saving plans, and launch more water-saving measures.

In 2020, the total water consumption of the Company was 59.2 million liters, and the water intensity in 2019 was 1.0192 million liters/NT$100 million, a decrease of about 4.97% compared to 2018; the total amount of wastewater in 2020 was 22.58 million liters, and the discharge volume decreased 1.1% from 2019.

◎Total weight of waste

The wastes in the Company's plants are general business wastes, including inorganic

Assessment criteria	Actual governance			Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
			sludge waste, waste plastic mixture, waste wood mixture, household garbage, waste flame retardant materials, waste fiber or other mixtures e.g. cotton and cloth, and there is no harmful waste. The total volume of waste in 2020 was 749.25 tons, of which inorganic sludge waste accounted for the largest share, about 684.28 tons. The Company complies with the environmental protection regulations of the competent authority for waste disposal, mainly through outsourcing transportation, and signs contracts with qualified waste removal and treatment companies meeting the requirements of relevant regulations as required by laws, while ensuring that outsourcing manufacturers properly handle each item pursuant to the laws.	
IV. Social Issues (I) Does the company have the relevant management policies and procedures stipulated in accordance with the relevant laws and regulations and international conventions on human rights?	✓		The Company values the opinions of employees, protects the rights and interests of employees, is committed to improving working conditions and working environment, provides employee channels for suggestions and complaints, and holds regular employee-employer meetings to strengthen employee-employer collaboration.	No material deviation
(II) Has the company established and implemented reasonable measures for employee benefits (including: remuneration, holidays and other benefits), and appropriately reflect the business performance or achievements in the employee remuneration?	✓		The salary assessment of the Company is based on educational qualifications and relevant experience, and is superior to the wage standard of the "Labor Standards Act." The salary per capita in December 2020 was higher than the average salary in Taiwan reported by the Directorate General of Budget, Accounting and Statistics (DGBAS). Currently, the starting salary of direct personnel is more than 1.3 times the average salary, and higher than the salary level of the industry. The employees	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
			are also entitled to monthly performance incentives, surplus distribution, and year-end bonuses. The average annual salary of 2020 is 16 months. The floating incentives, such as employee performance incentives, bonuses, and year-end bonuses are distributed be based on the employee's personal contribution, key performance indicator (KPI) achievement rate, and performance appraisal results	
(III) Does the company provide employees with a safe and healthy work environment, and provide safety and health education to employees regularly?	✓		The Company handles the safety and health tasks pursuant to the regulations related to organization and personnel in the Occupational Safety and Health Act.	No material deviation
(IV) Does the company establish effective training programs for employee's career development?	✓		The Company has an internal promotion system and training programs	No material deviation
(V) Has the company complied with laws and international standards with respect to customers' health, safety and privacy, marketing and labeling in all products and services offered, and implemented consumer protection policies and complaint procedures?	✓		The Company values customers' opinions, and provides product inquiry contact windows and an online customer service mailbox at the Stakeholders Section on the Company's website. In addition to visiting customers from time to time, it also conducts customer satisfaction surveys every year and understands customer needs through distributor conferences. The Company insists on the principle of good faith to handle and give feedback, to protect the interests of customers.	No material deviation
(VI) Has the company established supplier management policies demanding compliance with relevant regulations and their execution	✓		The Company has established "Supplier Management Procedures" and "Supplier Social Responsibility and Code of Conduct," disclosed on the Company's website, to enable suppliers to understand and comply with the Company's product safety and	No material deviation

Assessment criteria	Actual governance			Deviation and causes of deviation from Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies
	Yes	No	Summary description	
status regarding issues such as environmental, occupational safety, and health or labor rights?			ethical requirements, and to enhance their social and environmental responsibility, including requirements for suppliers' ethical standards, respect for human rights, environmental sustainability, privacy and intellectual property rights, healthy and safe working environment; other than requiring suppliers to cooperate closely, the suppliers are also regularly evaluated. When the Company purchases goods, it also needs to comply with the environmental laws and regulations of the country where it is located, and industry regulations such as the source of conflict minerals.	
V. Has the company taken reference from the internationally accepted reporting standards or guidance when compiling CSR reports to disclose non-financial information? Does the Company obtain the confirmation or affirmation opinion from a third party for the aforementioned reports?	✓		The Company's corporate social responsibility report has been assured by CPA Wang Young-Sheng from KPMG Taiwan with the issuance of the assurance report. .	No material deviation
VI. For companies who have established corporate responsibility code of conducts in accordance with the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEx-Listed Companies,” please describe the current practice and any deviations from the code of conduct: There is no material deviation between the current operation and the Best Practice Principles.				
VII. Any other essential information that may help us to understand the performance of corporate social responsibility better: None				

(VI) The state of the company's performance in the area of ethical corporate management, any variance from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and the reason for any such variance:

Assessment criteria	Actual governance			Nonconformity to the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and reasons thereof
	Yes	No	Summary description	
I. Establishment of Corporate Conduct and Ethics Policy and Implementation Measures (I) Does the Company establish corporate conduct and ethics policy that is approved by the Board of Directors and document such policy and procedure and ensure the commitment of the Board and Management team in the implementation of the policy thereof, in the bylaws and publicly available documents?	✓		The Company has approved the “Ethical Corporate Management Best Practice Principles” and related operational procedures, while presenting a CSR report to communicate that the Company takes ethical management as the philosophy of sustainable development. The Board of Directors and the senior management actively implement the commitments of the ethical management, and thoroughly execute in the internal management and business activities.	No material deviation.
(II) Has the company established a risk assessment mechanism against unethical behavior, analyzed and assessed business activities within their business scope on a regular basis that are at a higher risk of being involved in unethical behavior, and established prevention programs at least covering the preventive measures specified in Paragraph 2, Article 7 “Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies”?	✓		The Company has established the “Procedures for Ethical Management and Guidelines for Conduct” to establish an effective accounting system and internal control system specifically preventing business activities with risk of unethical conduct. The auditing unit is responsible for formulating the ethical management policy and prevention programs, auditing compliance and supervising the implementation, and regularly analyzing and evaluating the risks of unethical conduct in the business scope for reporting to the Board of Directors.	No material deviation.

Assessment criteria	Actual governance			Nonconformity to the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and reasons thereof
	Yes	No	Summary description	
(III) Does the Company establish relevant policies that are duly enforced to prevent unethical conduct, provide and implement operating procedures, behavioral guidelines, the penalty for violation and appeal system in such policies, as well as evaluating and amending the aforementioned policies on a regular basis?	✓		In order to implement the prevention of unethical conduct, the Board of Directors has passed the "Ethical Corporate Management Best Practice Principles" and "Code of Ethical Conduct," while specifying various operational procedures and conduct guidelines, to specifically regulate the matters that the Company's personnel should pay attention to when conducting business. For new employees, promotional courses are arranged. Meetings and training to employees are conducted from time to time every year. In addition, a reward and punishment system is established to provide internal and external complaints and whistle-blowing channels in order to prevent unethical conduct rigorously.	No material deviation.
II. Implementation of ethical management (I) Does the Company evaluate the integrity of all counterparties it has business relationships with? Are there any integrity clauses in the agreements it signs with business partners?	✓		The rights and obligations of the Company and its counterparts are stipulated in the contract to be fully complied with.	No material deviation.
(II) Does the Company task a unit that reports directly to the Board of Directors and with promoting ethical standards, making periodical updates (at least once a year) to the Board on business integrity management policy, as well as the supervision of measures for prevention of unethical conduct?	✓		The Company has established the “Ethical Corporate Management Best Practice Principles,” and the Audit Office is responsible for formulating and supervising the implementation of ethical management policy and prevention programs, with regular reports to the Board of Directors.	No material deviation.

Assessment criteria	Actual governance			Nonconformity to the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and reasons thereof
	Yes	No	Summary description	
(III) Does the Company have any policy that prevents conflict of interest and channels that facilitate the report of conflicting interests?	✓		The Company has an "Employee’s Code" specifying that all employees shall not receive benefits of more than NT$100. It prohibits the Company's to have transactions or business relations with employees and their relatives, to prevent employees from earning personal interests on the cost of the Company’s interests.	No material deviation.
(IV) Has the Company implemented effective accounting and internal control systems to maintain business integrity? Do internal or external auditors review these systems on a regular basis?	✓		In order to ensure the implementation of ethical management, the Company has established an effective accounting system and internal control system, and internal auditors regularly audit the compliance with the previous system.	No material deviation.
(V) Does the Company conduct internal and external ethical training programs on a regular basis?	✓		The Company promotes the concept of ethical management and its importance from time to time.	No material deviation.
III. Implementation of whistle-blowing system (I) Does the Company provide incentives and means for Employees to report malpractice? Does the Company dedicate personnel to investigate the reported malpractice?	✓		The Company has a responsibility unit to handle related affairs pursuant to the process set forth in the procedures.	No material deviation.
(II) Has the Company implemented any standard procedures or confidentiality measures for handling reported malpractices?	✓		The Company has established the Corporate Governance Best-Practice Principles, and operates as required.	No material deviation.
(III)Does the Company assure malpractice reporters that they will not be mistreated for making such reports?	✓		The Company encourage whistleblowing, and will protect the whistleblower.	No material deviation.

Assessment criteria	Actual governance			Nonconformity to the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and reasons thereof
	Yes	No	Summary description	
IV. Enhanced information disclosure (I) Has the company disclosed relevant CSR principles and implementation on its website and Market Observation Post System?	✓		The related corporate culture, operating guidelines, and implementation are disclosed on the website, MOPS, annual reports, and CSR reports.	No material deviation.
V. If the Company has established business integrity policies in accordance with "Ethical Corporate Management Best Practice Principles for TWSE/TPEX-Listed Companies," please describe its current practices and any deviations from the Best Practice Principles There is no material deviation between the current operation and the Best Practice Principles.				
VI. Other material information that helps to understand the practice of ethical management of the company: (e.g., the review and revision of the best-practice principles of the Company in ethical management)				

1. The Company complies with the Company Act, Securities and Exchange Act, Business Entity Accounting Act, Political Donations Act, Anti-Corruption Act, Government Procurement Act, Act on Recusal of Public Servants Due to Conflicts of Interest, regulations related to TWSE/TPEx listing companies, and other regulations related to business conducts, as the basis of implementation of ethical management.
2. The Company has a company website for the public to learn about the Company. Important financial and business information is disclosed on public information websites in a timely manner pursuant to laws and regulations. For general investors to review, and the implementation of social responsibilities is disclosed in the prospectus.
3. The Company has formulated the internal control system, internal audit system, and various management procedures; the auditors and external professionals (brokers or accountants) randomly inspect their implementation status from time to time, so that the risks from conducting business to the Company may be mitigated sufficiently, and the investors' interests are protected.

(VII) For Corporate Governance Guidelines and Regulations and other relevant internal policies, the Company should disclose how to access these policies:

The Company has established the related rules pursuant to the “Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies” as follows. The operation and promotion of corporate governance are implemented. Investors may check at the Company’s website https://www.coremaxcorp.com/zh-tw/ and MOPS.

1. Code of Ethical Conduct;
2. Rules of Procedure for Shareholder Meetings;
3. Regulations Governing Procedure for Board of Directors Meetings;
4. Procedures for Election of Directors;
5. Ethical Corporate Management Best Practice Principles;
6. Remuneration Committee Charter;
7. Corporate Governance Best-Practice Principles

(VIII) Other important information that is sufficient to enhance the understanding of the operation of corporate governance

Related regulations are disclosed in the annual report and AGM agenda handbook; both are available on the MOPS: http://mops.twse.com.tw

(IX) Internal Control Systems Implementation:

1. Statement of Internal Control System

Coremax Corporation

Statement of Internal Control System

Date: February 26, 2021

The Company declares the following concerning its internal control system during the fiscal year 2020, based on the findings of a self-assessment:

I. The Company acknowledges that the establishment, implementation, and maintenance of the internal control system are the responsibilities of the Board of Directors and Managers of the Company. As such, the Company has established the aforementioned system. Its objectives are to provide reasonable assurance for the effectiveness and efficiency of its operations (including profitability, performance, and the guarantee of assets safety, etc.), reliable, timely and transparent reporting, and conformity to applicable rules, regulations, and laws.

II. The internal control system has its inherent limitations. Regardless of how exhaustive the design is, an effective internal control system can only provide reasonable assurance for the achievement of the aforementioned three objectives. Further, due to changes in the environment or circumstances, the effectiveness of the internal control system may vary accordingly. Nevertheless, the Company's internal control system has set up a self-supervision mechanism. Once a deficiency has been identified, the Company will take remedial actions immediately.

III. In accordance with the determining criteria for the effectiveness of the internal control system prescribed in the "Regulations Governing the Establishment of Internal Control Systems by Public Companies" (hereafter the "Regulations"), the Company evaluated the effectiveness of the design and execution for its internal control system. The determining criteria of the internal control system prescribed in the "Regulations" are based on the process of management control, dividing the internal control system into five composite factors: 1. control of the environment, 2. risk evaluation, 3. control of operations, 4. information and communication, and 5. supervision. The composition of each element also includes several items. Please refer to the "Regulations" for the aforesaid items.

IV. The Company has adopted the aforementioned determining criteria of the internal control system to evaluate the effectiveness of design and execution for its own internal control system.

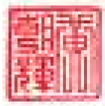
V. Based on the evaluation result of the preceding paragraph, the Company believes that its internal control system (including the supervision and management of its subsidiaries) as of December 31, 2020, including understanding the achievement for the objectives of effectiveness and efficiency of its operations, reliability, timeliness and transparency of its reporting and compliance with the applicable law and regulations, was effective in design and execution, and can be reasonably assured of the achievement of the aforementioned objectives.

VI. This statement will serve as the main content of the Company's annual report and prospectus and will be made available to the public. If the aforesaid public content has any illegal events, including falseness or concealment etc., it shall be liable to the legal liabilities stipulated in Article 20, 32, 171, and 174 of the Securities and Exchange Act.

VII. This Statement has been passed by the Board of Directors Meeting of the Company held on February 26, 2021, where none of the nine attending Directors expressed dissenting opinions, and the remainder all affirmed the content of this Statement.

Coremax Corporation 

Chairman: Ho, Chi-Cheng 

General Manager: Huang, Chao-Hui 

2. Is any CPA entrusted to perform a special audit on the internal control audit report: None

(X) For the most recent year until the publication date of the annual report, penalties imposed against the Company and its staff, or penalties imposed by the company against its staff for violations of internal control or regulations. State any corrective actions are taken in the most recent years up to the date of the annual report: None.

(XI) For 2020 and 2021 until the publication date of the annual report, major resolutions made in Shareholders' and Board meetings:

1. Key resolutions of 2020 AGM and implementation

Date of meeting	Major resolutions	Execution
June 12, 2020	Ratifications: (1) 2019 business and financial reports (2) Proposal of earnings distribution for 2019. Discussions and elections (1) Amendment of "Procedures for Acquisition or Disposal of Assets." (2) Amendment to the "Rules of Procedure for Shareholder Meetings" (3) Proposal of re-electing directors (4) Proposal to relieve the new directors and their representatives from non-competition restrictions.	The resolution was adopted. The ex-dividend base date was July 1, 2020. Operated pursuant to the amended procedures Operated pursuant to the amended procedures The registration was approved by MOEA on July 10, 2020. Each director and representative of the institutional director proceeded as required by laws.

2. Material resolutions in Board Meeting:

Date of meeting	Major resolutions
March 18, 2020	● 2019 "Assessment for Effectiveness of the Internal Control System", and the "Statement of Internal Control System." ● Proposal of distributing employee remuneration and directors' and supervisors' remuneration for 2019. ● Approved 2019 business and financial reports, parent company-only financial statements and consolidated financial statements. ● Approved the proposal of earnings distribution for 2019. ● Proposal of re-electing directors ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets." ● Amendment to the Corporate Governance Best-Practice Principles. ● Amendment to the Corporate Social Responsibility Best Practice Principles ● Amendment to the Ethical Corporate Management Best Practice Principles. ● Amendment to the Procedures for Ethical Management and Guidelines for Conduct ● Amendment to the Rules of Procedure for Shareholder Meetings

Date of meeting	Major resolutions
	● Approved the amount of endorsement/guaranteed provided to subsidiaries ● Appointment of the general manager and relieve the managerial officers from non-competition restrictions ● Approve the convention of the 2019 general shareholders' meeting.
March 18, 2020	● Approved the implementation of transferring the repurchased shares to employees for the first time
May 6, 2020	● Approved the consolidated financial statements for 2020 Q1. ● Proposal of amending the Approval Authority Chart. ● Proposal of amending the "Procedures for Acquisition or Disposal of Assets." ● Amendment to the transferring the repurchased shares to employees for the first time. ● Addition to the causes of convening the 2020 general shareholders' meeting, and the Chairman .was authorized to change the venue of the general shareholders' meeting if required.
June 12, 2020	● Proposal to elect the 10th term of the Company's chairman.
August 5, 2020	● Approved the consolidated financial statements for 2020 Q2. ● Appointment of members of the Remuneration Committee under the 10th Term of the Board of Directors ● Approved the extension of the expired limits with banks.
August 5, 2020	● Approved items by the Remuneration Committee.
November 6, 2020	● Approved the consolidated financial statements for 2020 Q3. ● Proposal to participate in the capital increase in cash by Heng I Chemical Co., Ltd. ● The Company intended to conduct a new share issuance for a capital increase in cash in 2020. ● Amendment to some clauses of the Rules of Procedure for Shareholder Meetings. ● Approved the extension of the expired limits with banks. ● The Company's invested subsidiary loaning of fund to a sub-subsidiary. ● Amendment to the "Regulations Governing Procedure for Board of Directors Meetings." ● Amendment to "Code of Ethical conduct." ● Amendment to the Audit Committee Charter. ● Amendment to the "Rules Governing the Scope of Powers of Independent Directors."
November 16, 2020	● Proposal to renewal the land leasing from the subsidiary, Heng I Chemical Co., Ltd., for the P6L3 Nickel(II) sulfate production line. ● The Company disposes the right-of-use asset of P6L1 to the subsidiary, Uranus Chemicals Co., Ltd.
December 23, 2020	● Resolutions of the Remuneration Committee. ● Proposal of distributing employee remuneration and directors' and supervisors' remuneration for 2020. ● Proposal of the internal audit plan for 2021. ● Determination of the issuance price for a capital increase in cash for 2020 and other related matters. ● To cope with the overall operating plans and strategy adjustment, it is intended to cease the operations of sub-subsidiary, CoreMax Zhuhai Chemical Co., Ltd. ● Proposal of amending the Approval Authority Chart. ● Evaluation of the independence and suitability of the appointed CPAs from KPMG Taiwan.

Date of meeting	Major resolutions
February 26, 2021	● 2020 "Assessment for Effectiveness of the Internal Control System" and the "Statement of Internal Control System." ● Proposal of the internal audit plan for 2020. ● Approved 2020 business and financial reports, parent company-only financial statements and consolidated financial statements. ● Approved the proposal of earnings distribution for 2020. ● Amendment to the Company's Articles of Incorporation. ● Approved the extension of the bank borrowings. ● Amount of endorsement/guaranteed provided to subsidiaries ● The extension of the subsidiaries' limits with banks. ● To cope with the working capital, it is intended to apply NT$400 million credit facility from a bank. ● The Company endorses/guarantees the subsidiary's application of credit limit from the bank. ● Loaning of funds among sub-subsidiaries. ● Amendment to the Rules of Procedure for Shareholder Meetings. ● Reappointment of the deputy spokesperson. ● Approve the convention of the 2020 general shareholders' meeting.
May 4, 2021	● Discussion of managerial officers' remunerations. ● Reappointment of general manager and accounting officer, appointment of manufacturing and R&D officers. ● Proposal to relieve managerial officers from non-competition restriction. ● Approved the consolidated financial statements for 2021 Q1. ● Proposal to participate in the capital increase in cash by Uranus Chemicals Co., Ltd. ● The Company's invested subsidiary loaning of fund. ● To meet the operation demands, it is intended to apply NT$80 credit facility from International Bills Finance, and the renewal is guaranteed by issuing commercial paper.

(XII) For the most recent year until the publication date of the annual report, major issues of record or written statements made by any Director or Supervisor dissenting to important resolutions passed by the Board of Directors: None.

(XIII) For the most recent year until the publication date of the annual report, resignation or dismissal of the Company's Chairperson, General Manager, and Supervisors of Accounting, Finance, Internal Audit, and R&D:

Position	Name	Date of assuming position	Date of discharge	Reason of resignation or discharge
General Manager	Huang, Chao-Hui	March 18, 2020	May 4, 2021	Retirement

V. Information Regarding the Company's Professional Service Fees

(I) Information of CPAs

Accounting Firm	Name of CPA		Period covered by CPA's audit	Remarks
KPMG Taiwan	Yu, Wan-Yuan	Yu, Chi-Lung	2020	None.

Unit: NT$ (thousand)

Amount \ Professional service fee item		Audit fee	Non-audit fee	Total
1	Less than NTS$2,000 thousand		✓	650
2	NTS$2,000 thousand (including) to NTS$4,000 thousand	✓		3,970
3	NTS$4,000 thousand (including) to NTS$6,000 thousand			
4	NTS$6,000 thousand (including) to NTS$8,000 thousand			
5	NTS$8,000 thousand (including) to NTS$10,000 thousand			
6	More than NTS$10,000 thousand (including)			

(II) CPA's professional service fees

Unit: NT$ (thousand)

Accounting Firm Name	Certified Public Accountant Name	Audit Fee	Non-audit fee					Certified Public Accountant Period covered by CPA's audit	Remarks
			System (policy) Design	Business registration	Human Resources	Others	Subtotal		
KPMG Taiwan	Yu, Wan-Yuan Yu, Chi-Lung	3,970	—	—	—	650 (Note)	650	2020 Q1 to Q4	—

Note : Tax advisory service NT$150 thousand and CSR report convinced NT$500 thousand

(III) For non-audit fees paid to CPAs, accounting firms, and affiliated companies thereof that amount to more than 1/4 of the audit fees, the disclosure should be made regarding the amount of audit and non-audit fees, and the service content of audit and non-audit fees: None

(IV) Changes in the accounting firm that result in lesser audit fees paid in comparison to the previous year, and disclosure for the change in audit fee, and the reason for the change: None.

(V) Reduction of audit fees by more than 15% compared to the previous year, and disclosure for the amount and percentage reduced, and the reason for the reduction: None.

VI. Change in CPA: None.

VII.Names, Positions and Tenure of any of the Company's Chairman, General Manager, or managerial officers responsible for Financial or Accounting Affairs Being Employed by the Auditor's Firm or Any of Its Affiliated Company in the Most Recent Year Should Be Disclosed: None.

VIII.Evaluation of the External Auditor's Independence

The Audit Committee assess the independence of external auditor annually by following evaluation standards and report to the Board of Directors:

I. The auditor's independence declaration.
II. The Audit Committee pre-review all auditing services conducted by the external auditors.
III. Ensure the audit partner rotates every five years
IV. Annually evaluate the independence of the external auditosr based on the results of the auditor review regarding its financial interests, commercial relations, employment relations, and etc.

IX. For the Most Recent Year until the Publication Date of the Annual Report, the Transfer of Equity Interest and Change in Stock Pledge of Directors, Supervisors, managerial officers and Shareholders with Stake of 10% or More

(I) Changes of equity:

Unit: Share

Position	Name	2020		2021 As of April 6	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Chairman / General Manager	Ho, Chi-Cheng (Note 1)	-	-	75,304	-
Director / Major shareholder	Chang Hsing Investment Co., Ltd. Representative: Ho, Chi-Chao Representative: Huang, Chao-Hui (Note 2) Representative: Chiu, Hsien Tung (Note 3)	500,000	2,000,000	600,000	-

Position	Name	2020		2021 As of April 6	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Director	Itochu Corporation Representative: Sakurai Hiroyuki (Note 4)	(1,680,000)	-	-	-
Director / Major shareholder	Cheng Jade Enterprise Co., Ltd. Representative: Ho, Eugene Lawrence (Note 5)	1,180,000	300,000	1,105,250	-
Director	Ho, Chi-Chou	(68,000)	-	28,847	-
Director	Cheng, Chih-Fa	-	-	-	-
Independent director	Lai, Ching-Yuan	-	-	1,000	-
Independent director	Hsu, I-Ping	-	-	-	-
Independent director	Wang, Wen-Tsung	-	-	-	-
Senior Vice President / General Manager	Chang ,Yuan-Lung	-	-	-	-
Chief Finance Officer	Huang, Chao-Hui (Note 1)	-	-		-
Director	Weng, Chih-Hsien	-	-	24,432	-

Note 1: On March 18, 2020, due to adjustment of positions, General Manager, Ho, Chi-Cheng was replaced by the Senior VP, Huang, Chao-Hui.

Note 2: On June 12, 2020, all the directors were re-elected. The elected director, Chan Sing Investment Co., Ltd appointed the representative: Huang, Chao-Hui.

Note 3: On June 12, 2020, all the directors were re-elected. Chan Sing Investment Co., Ltd was elected as a director; on April 1, 2021. It replaced the representative, Huang, Chao-Hui with Chiu, Hsien Tung.

Note 4: The institutional director, Itochu Corporation, transferred more than one-half of the shares held at the time of being elected during its term of office. Therefore the Company announced its natural discharge on February 20, 2020.

Note 5: On June 12, 2020, all the directors were re-elected. The elected director, Cheng Jade Enterprise Co., Ltd., replaced the representative Ho, Chi-Chao with Ho, Eugene Lawrence on July 14, 2020.

(II) Share transfer where the counterparty is a related party:

Name (Note 1)	Reason of share transfer (Note 2)	Date of transaction	Counterparty of transaction	Relationship of the counterparty with the Company, directors, supervisors, managerial officers, and shareholders with 10% or more stake:	Shares	Transaction price
Hsu, I-Ping	Acquired	October 28, 2020	Peng, Man-Man	Spouse	14,511	55.6
Hsu, I-Ping	Disposals	November 16, 2020	Hsu, Han-Ting	Child of minor age	14,511	51

(III) Share pledge where the counterparty is a related party: None

X. Shareholding Ratio of Top 10 Shareholders and Their Affiliated Persons, Spouses, or Other Relatives within Two Degrees of Kinship

Date: April 6, 2021, Unit: Share; %

Name	One's self Spouse and child of minor age		Shareholdings of spouse and minor child(ren)		Shareholding under other person(s)		Top 10 Shareholders and Their Affiliated Persons, Spouses, or Other Relatives within Two Degrees of Kinship		Remarks
	Number of shares	Shareholding Percentage	Number of shares	Percentage of	Number of shares	Percentage of	Name	Relationship	
Chang Sing Investment Co., Ltd.	13,802,833	13.40	-	-	-	-	-	-	None
Representative: Ho, Chi-Chao	903,566	0.88	–	–	–	–	Cheng Jade Enterprise	Chairman Same person	None
							Uranus Chemicals	Chairman Same person	
							Ho, Chi-Cheng	Chairman	
Cheng Jade Enterprise Co., Ltd.	13,261,727	12.87	-	-	-	-	-	-	None
Representative: Ho, Chi-Chao	903,566	0.88	-	-	-	-	Chang Sing Investment	Chairman Same person	None
							Uranus Chemicals	Chairman Same person	
							Ho, Chi-Cheng	Chairman	
Fubon Life Insurance Co., Ltd.	5,999,138	5.82	-	-	-	-	-	-	None
Representative:Richaed M. Tsai	-	-	-	-	-	-	-	-	None
Uranus Chemicals Co., Ltd.	3,013,495	2.93	-	-	-	-	-	-	None
Representative: Ho, Chi-Chao	903,566	0.88	-	-	-	-	Chang Sing Investment	Chairman Same person	None
							Cheng Jade Enterprise	Chairman Same person	
							Ho, Chi-Cheng	Chairman	

Name	One's self Spouse and child of minor age		Shareholdings of spouse and minor child(ren)		Shareholding under other person(s)		Top 10 Shareholders and Their Affiliated Persons, Spouses, or Other Relatives within Two Degrees of Kinship		Remarks
	Number of shares	Shareholding Percentage	Number of shares	Percentage of	Number of shares	Percentage of	Name	Relationship	
Treasury Share-Specific Account, Coremax Corporation	2,025,000	1.97	-	-	-	-	-	-	None
Fubon Securities Co., Ltd.	1,352,914	1.31							None
Representative: Michael Lin	-	-	-	-	-	-	-	-	None
TransGlobe Life Insurance Inc.	930,000	0.90							None
Representative: Stiven Peng	-	-	-	-	-	-	-	-	None
Ho, Chi-Cheng	903,566	0.88	-	-	-	-	Chang Sing Investment	Chairman	None
							Cheng Jade Enterprise	Chairman	
							Uranus Chemicals	Chairman	
Tsai, Wen-Hung	700,000	0.68							
Liu, Chi-Wen	691,805	0.67	-	-	-	-			None

XI. Number of Shares and Consolidated Shareholding Percentage of Investee Company Held by the Company, Directors, Supervisors, and Managerial Officers of the Company, and Entities in which the Company has Direct or Indirect Controlling Interests

Total Shareholding

Date: April 6, 2021, Unit: thousand share

Investees	Invested by the Company		Held by Directors, Supervisors, managerial officers, and directly/indirectly controlled entities		Aggregated investment	
	Number of shares	Percentage of shareholding	Number of shares	Percentage of shareholding	Number of shares	Percentage of shareholding
Coremax(BVI)Corporation	9,658	100%	-	-	9,658	100%
Heng I Chemical Co., Ltd.	41,057	82.44%	619	1.24%	41,676	83.68%
Uranus Chemicals Co., Ltd.	32,592	62.68%	4,053	7.79%	36,645	70.47%
CoreMax Zhuhai Chemical Co., Ltd.	(Note 1)	100%	-	-	(Note 1)	100%
CoreMax Ningbo Chemical Co., Ltd.	(Note 1)	100%	-	-	(Note 1)	100%
Coremax(Thailand) Co., Ltd.	70	100%	-	-	70	100%
CoreMax (Zhangzhou) Chemical Co., Ltd.	(Note 1)	82%	-	-	(Note 1)	100%
Jiangxi Tianjiang Materials Limited	(Note 1)	100%	-	-	(Note 1)	100%

Note 1: That investee is a limited company and thus no shares issued, without face value

Four. Fundraising

I. Company Capital and Shares

(I) Source of Share Capital

1. Share capital formation

Unit: NT$ thousand; thousand shares

Year/Month	Issuance Price (NT$)	Authorized capital		Paid-in capital		Remarks		
		Number of shares (shares in thousands)	Amount (Thousand)	Number of shares (shares in thousands)	Amount (Thousand)	Source of capital	Property other than cash provided as capital contributions	Others
June 1992	10	2,000	20,000	500	5,000	Capital increase by cash	None	Note 1
Sep 1992	10	2,500	25,000	2,500	25,000	Capital increase by cash	None	Note 2
Jan 1993	10	5,000	50,000	5,000	50,000	Capital increase by cash	None	Note 3
Feb 1995	10	8,000	80,000	8,000	80,000	Capital increase by cash	None	Note 4
Dec 2000	10	11,000	110,000	11,000	110,000	Capital increase by cash	None	Note 5
Oct 2011	10	15,000	150,000	12,680	126,800	Capital increase by cash	None	Note 6
Oct 2011	10	15,000	150,000	14,000	140,000	Surplus transferred to a capital increase	None	Note 6
May 2003	10	20,000	200,000	16,800	168,000	Surplus transferred to a capital increase	None	Note 7
June 2004	10	21,840	218,400	21,840	218,400	Surplus transferred to a capital increase	None	Note 8
Dec 2004	15	26,840	268,400	26,840	268,400	Capital increase by cash	None	Note 9
July 2005	10	48,000	480,000	32,458	324,580	Surplus and employees' bonus transferred to a capital increase	None	Note 10
July 2007	10	48,000	480,000	34,081	340,809	Surplus transferred to a capital increase	None	Note 11
July 2008	10	48,000	480,000	36,666	366,666	Surplus and employees' bonus transferred to a capital increase	None	Note 12
Sep 2009	10	48,000	480,000	38,499	384,999	Surplus transferred to a capital increase	None	Note 13
May 2010	25	48,000	480,000	41,499	414,999	Capital increase by cash	None	Note 14
July 2011	**33.99**	**48,000**	**480,000**	**44,499**	**444,999**	**Capital increased by cash via private placement**	**None**	**Note 15**
Dec 2011	23	60,000	600,000	48,629	486,299	Capital increase by cash	None	Note 16
Sep 2012	-	120,000	1,200,000	48,629	486,299	Corporate bonds	None	Note 17

Year/Month	Issuance Price (NT$)	Authorized capital		Paid-in capital		Remarks		
		Number of shares (shares in thousands)	Amount (Thousand)	Number of shares (shares in thousands)	Amount (Thousand)	Source of capital	Property other than cash provided as capital contributions	Others
Oct 2013	10	120,000	1,200,000	51,061	510,614	Capital surplus transferred to a capital increase	None	Note 18
May 2014	19.40	120,000	1,200,000	51,417	514,171	Shares converted from corporate bond	None	Note 19
August 2014	19.10	120,000	1,200,000	51,458	514,583	Shares converted from corporate bond	None	Note 20
December 2014	19.10	120,000	1,200,000	58,421	584,216	Shares converted from corporate bond	None	Note 21
April 2015	19.10	120,000	1,200,000	61,636	616,363	Shares converted from corporate bond	None	Note 22
May 2015	18.80	120,000	1,200,000	68,437	684,373	Shares converted from corporate bond	None	Note 23
August 2015	18.80	120,000	1,200,000	70,264	702,646	Shares converted from corporate bond	None	Note 24
February 2016	18.80	120,000	1,200,000	73,964	739,644	Issuance of new shares for conversion	None	Note 25
May 2016	18.20	120,000	1,200,000	74,645	746,453	Shares converted from corporate bond	None	Note 26
Sep 2016	18.20	120,000	1,200,000	75,714	757,144	Shares converted from corporate bond	None	Note 27
Nov 2016	18.20	120,000	1,200,000	75,725	757,254	Shares converted from corporate bond	None	Note 28
August 2017	53.10	120,000	1,200,000	75,797	757,977	Shares converted from corporate bond	None	Note 29
Nov 2017	53.10	120,000	1,200,000	86,123	861,234	Shares converted from corporate bond	None	Note 30
April 2018	53.10	120,000	1,200,000	86,473	864,737	Shares converted from corporate bond	None	Note 31
May 2018	53.10	120,000	1,200,000	86,626	866,262	Shares converted from corporate bond	None	Note 32
August 2018	53.10	120,000	1,200,000	86,747	867,467	Shares converted from corporate bond	None	Note 33
Nov 2018	51.80	120,000	1,200,000	86,845	868,452	Shares converted from corporate bond	None	Note 34
Dec 2018	75.00	120,000	1,200,000	92,845	928,452	Capital increase by cash	None	Note 35
April 2019	51.80	120,000	1,200,000	92,941	929,417	Shares converted from corporate bond	None	Note 36

Year/Month	Issuance Price (NT$)	Authorized capital		Paid-in capital		Remarks		
		Number of shares (shares in thousands)	Amount (Thousand)	Number of shares (shares in thousands)	Amount (Thousand)	Source of capital	Property other than cash provided as capital contributions	Others
May 2019	51.40	120,000	1,200,000	93,029	930,293	Shares converted from corporate bond	None	Note 37
March 2021	50.00	120,000	1,200,000	103,029	1,030,293	Capital increase by cash	None	Note 38

Note 1:The effective (approval) date of the capital increase and document no. is June 16, 1992, (81) Chien-San-Zi-Zhi No. 244737.
Note 2:The effective (approval) date of the capital increase and document no. is Sep 2, 1992, (81) Chien-San-Gen-Zhi No. 338667.
Note 3:The effective (approval) date of the capital increase and document no. is Jan 5, 1993, Jing-Tou-Sheng (82) Gong-Shang No. 0025.
Note 4:The effective (approval) date of the capital increase and document no. is Feb 13, 1995, Jing (84)Shang No. 101390.
Note 5:The effective (approval) date of the capital increase and document no. is December 15, 2000, Jing(089)Shang No. 0147030.
Note 6:The effective (approval) date of the capital increase and document no. is Oct 22, 2001 Jing (090) 09001399690.
Note 7:The effective (approval) date of the capital increase and document no. is May 22, 2003, Jin-Shou-Shang-Zhi No. 09201158570.
Note 8:The effective (approval) date of the capital increase and document no. is June 14, 2004, Jin-Shou-Zhong-Zhi No. 0933224775.
Note 9:The effective (approval) date of the capital increase and document no. is Dec 15, 2004, Jin-Shou-Zhong-Zhi No. 09333184740.
Note 10:The effective (approval) date of the capital increase and document no. is July 11, 2005, Jin-Shou-Zhong-Zhi No. 09432420780.
Note 11:The effective (approval) date of the capital increase and document no. is July 17, 2007, Jin-Shou-Zhong-Zhi No. 09632446760.
Note 12:The effective (approval) date of the capital increase and document no. is July 14, 2008, Jin-Shou-Zhong-Zhi No. 09732634900.
Note 13:The effective (approval) date of the capital increase and document no. is Sep 3, 2009, Jin-Shou-Zhong-Zhi No. 09832981650.
Note 14:The effective (approval) date of the capital increase and document no. is May 20, 2010, Jin-Shou-Zhong-Zhi No. 09932061900.
Note 15:The effective (approval) date of the capital increase and document no. is August 18, 2011, Jin-Shou-Zhong-Zhi No. 10032405170.
Note 16:The effective (approval) date of the capital increase and document no. is Dec 12, 2011, Jin-Shou-Zhong-Zhi No. 10032868730.
Note 17:The effective (approval) date of the capital increase and document no. is Sep 7, 2012, Jin-Shou-Zhong-Zhi No. 10132472950.
Note 18:The effective (approval) date of the capital increase and document no. is Oct 7, 2013, Jin-Shou-Shang-Zhi No. 10201207370.
Note 19:The effective (approval) date of the capital increase and document no. is May 29. 2014, Jin-Shou-Shang-Zhi No. 10301095770.
Note 20:The effective (approval) date of the capital increase and document no. is Aug 4, 2014, Jin-Shou-Shang-Zhi No. 10301161220.
Note 21:The effective (approval) date of the capital increase and document no. is Dec 12, 2014, Jin-Shou-Shang-Zhi No. 10301244740.
Note 22:The effective (approval) date of the capital increase and document no. is April 1, 2015, Jin-Shou-Shang-Zhi No. 10401047230.
Note 23:The effective (approval) date of the capital increase and document no. is May 21, 2015, Jin-Shou-Shang-Zhi No. 10401097270.
Note 24:The effective (approval) date of the capital increase and document no. is Aug 26, 2015, Jin-Shou-Shang-Zhi No. 10401176750.
Note 25:The effective (approval) date of the capital increase and document no. is Feb 1, 2016, Jin-Shou-Shang-Zhi No. 10501020130.
Note 26:The effective (approval) date of the capital increase and document no. is May 27, 2016, Jin-Shou-Shang-Zhi No. 10501112410.
Note 27:The effective (approval) date of the capital increase and document no. is Sep 7, 2016, Jin-Shou-Shang-Zhi No. 10501217590.
Note 28:The effective (approval) date of the capital increase and document no. is Nov 22, 2016, Jin-Shou-Shang-Zhi No. 10501271160.
Note 29:The effective (approval) date of the capital increase and document no. is Aug 15, 2017, Jin-Shou-Shang-Zhi No. 10601114860.
Note 30:The effective (approval) date of the capital increase and document no. is Nov 20, 2017, Jin-Shou-Shang-Zhi No. 10601157590.
Note 31:The effective (approval) date of the capital increase and document no. is April 11, 2018, Jin-Shou-Shang-Zhi No. 10701031380.
Note 32:The effective (approval) date of the capital increase and document no. is May 9, 2018, Jin-Shou-Shang-Zhi No. 10701049330.
Note 33:The effective (approval) date of the capital increase and document no. is Aug 15, 2018, Jin-Shou-Shang-Zhi No. 10701101270.
Note 34:The effective (approval) date of the capital increase and document no. is Nov 28, 2018, Jin-Shou-Shang-Zhi No. 10701143080.
Note 35:The effective (approval) date of the capital increase and document no. is Dec 25, 2018, Jin-Shou-Shang-Zhi No. 10701160470.
Note 36:The effective (approval) date of the capital increase and document no. is April 3, 2019, Jin-Shou-Shang-Zhi No. 10801033810.
Note 37:The effective (approval) date of the capital increase and document no. is May 21, 2019, Jin-Shou-Shang-Zhi No. 10801058870.
Note 38:The effective (approval) date of the capital increase and document no. is March 8, 2021, Jin-Shou-Shang-Zhi No. 11001026500.

2. Share type

Date: April 6, 2021; shares

Share type	Authorized capital			Remarks
	Outstanding shares (note)	Unissued shares	Total	
Common stock	101,004,269	16,970,731	120,000,000	None.

Note: The Company has issued 103,029,269 common shares (with 3,150,000 shares of the Company are privately placed common shares), deducting 2,025,000 shares increase in treasury stock in 2020.

3. Information Related to Shelf Registration: None

(II) Shareholder Structure

Date: April 6, 2021; shares

Shareholder structure / Amount	Governmental agencies	Financial institutions	Other legal persons	Foreign Institutions and foreigners	Individuals	Total
Number of shareholders	0	3	65	46	14,034	14,148
shares held	0	7,539,138	35,404,293	2,930,912	57,154,926	103,029,269
Percentage of shareholding	0.00%	7.32%	34.36%	2.85%	55.47%	100.00%

(III) Share ownership distribution

1. Common shares

Date: April 6, 2021; shares

Range of Shareholding	Number of Shareholders	shares held	Percentage of shareholding
1 to 999	3,946	280,913	0.27%
1,000 to 5,000	8,372	15,519,778	15.06%
5,001 to 10,000	982	7,345,474	7.13%
10,000 to 15,000	299	3,665,209	3.56%
15,001 to 20,000	169	2,990,439	2.90%
20,001 to 30,000	135	3,359,737	3.26%
30,001 to 40,000	65	2,283,524	2.22%
30,001 to 50,000	42	1,911,478	1.86%
50,001 to 100,000	61	4,183,154	4.06%
100,001 to 200,000	32	4,594,563	4.46%
200,001 to 400,000	19	5,241,190	5.09%
400,001 to 600,000	9	4,341,888	4.21%

Range of Shareholding	Number of Shareholders	shares held	Percentage of shareholding
600,001 to 800,000	9	6,023,249	5.85%
800,001 to 1,000,000	2	1,833,566	1.78%
More than 1,000,001	6	39,455,107	38.29%
Total	14,148	103,029,269	100.00%

2. Preference share: None

(IV) List of Major Shareholders

List all shareholders with a stake of 5 percent or greater, and if those are fewer than 10 shareholders, also list all shareholders who rank in the top 10 in shareholding percentage, and specify the number of shares and stake held by each shareholder:

Date: April 6, 2021; shares

Share / Name of Major Shareholder	shares held	Percentage of shareholding
Chang Sing Investment Co., Ltd.	13,802,833	13.40%
Cheng Jade Enterprise Co., Ltd.	13,261,727	12.87%
Fubon Life Insurance Co., Ltd.	5,999,138	5.82%
Uranus Chemicals Co., Ltd.	3,013,495	2.93%
Treasury Share-Specific Account, Coremax Corporation	2,025,000	1.97%
Fubon Securities Co., Ltd.	1,352,914	1.31%
TransGlobe Life Insurance Inc.	930,000	0.90%
Ho, Chi-Cheng	903,566	0.88%
Tsai, Wen-Hung	700,000	0.68%
Liu, Chi-Wen	691,805	0.67%
Total	42,680,478	41.43%

(V) Market share price, net worth, earnings, dividend and relevant information for the most recent two years

Unit: thousand shares; NT$;

Year / Item		2019	2020	As of March 31, 2021
Stock price per share	Highest	107.50	78.50	77.30
	Lowest	67.8	30.65	59.20
	Average	82.23	59.05	68.09
Net value per share	Prior to distribution	35.70	34.97	40.07
	After distribution	34.5	(Note 1)	
Earnings per share (EPS)	Weighted average outstanding shares	91,126	89,771	96,449

	Earnings per share (EPS)	Prior to retrospective adjustment	1.4	1.73	1.00
		After retrospective adjustment	1.4	(Note 1)	-
Dividend per share	Cash dividends		1.2267	(Note 1)	-
	Bonus shares	From earnings	-	-	-
		From capital reserves	-	-	-
	Cumulative unpaid dividends		-	-	-
Return on investment Analysis	Price earnings ratios		58.74	34.13	-
	Price to dividend ratio		67.03	(Note 1)	-
	Dividend Yield		1.49%	(Note 1)	-

Note 1: The figures of earning distribution have been approved by the Board of Directors, and to be concluded upon the resolution of the shareholders' meeting.

Note 2: Price/Earnings Ratio = Average Closing Price for the Year / Earnings per Share

Note 3: Price to dividend ratio = Average closing price for the period / Cash dividend per share.

Note 4: Dividend Yield = Cash dividend per share / Average closing price for the period.

(VI) The Company's Dividend Policy and Implementation Status:

1. Pursuant to the dividend policy set for in Article 28 of the Articles of Incorporation

If there is a surplus in the Company's annual settlement, tax shall be paid as required by laws. After offsetting the accumulated losses, another 10% shall be appropriated as the legal reserve. However, when the legal reserve has reached the Company's paid-in capital, the appropriation may be exempted; and the rest shall be appropriated or reversed as the special reserve pursuant to laws and regulations; if there is a balance, with the accumulated undistributed surplus, the Board of Directors shall propose a profit distribution and submit to the shareholders meeting to resolve the distribution of dividends to shareholders.

Because the Company is still in the growth stage, there will be capital needs for expansion of production lines and increased investment in the next few years. Based on capital expenditures, business expansion, and sound financial planning, the Company seeks stable development. Based on the distributable profit in the preceding paragraph, more than 10% of dividends may be distributed to shareholders, but when the distributable profit is less than 30% of the paid-up share capital, it may not be distributed; when the Company distributes stock dividends and cash dividends at the same time, the cash dividend distributions shall be no less than 20% of the total dividends distributable to the shareholders.

2. The proposed distribution of dividends

it is intended to appropriate NT$121,205 thousand from 2020 profit as the proposed dividends as cash dividends, or NT$1.2 per share. It is approved by the Company's

Board of Directors on February 26, 2021 and is proposed to be submitted to the shareholders' meeting for resolutions.

(VII) The impact on the operating performance of the Company and earnings per share by the proposal of the Shareholders' Meeting to issue bonus shares: Not applicable.

(VIII) Employees Bonus and Directors Remuneration

1. Employees' and directors' compensation policies as stated in the Articles of Incorporation:

   If there is a profit in the year, the Company shall allocate no less than 1.5% of the profit as employees' remuneration. The remuneration to employees will be distributed in shares or cash by a resolution made by the board of directors. Employees in subordinate companies who meet certain criteria are entitled to receive remuneration. The Company may have the Board of Directors resolve to appropriate no more than 5% of the aforementioned amount as the directors' remuneration. The distribution of employees' and directors' remunerations shall be reported in the Shareholders' Meeting.

   Where there is an accumulated loss, the profit shall be reserved to make up for the loss before appropriating the employees' and directors' remunerations.

2. The estimation basis of the remuneration for employees, and Directors for the current period, the computation basis for employees' remuneration distributed in shares, and accounting treatments for any discrepancies between the amounts estimated and the amounts disbursed:

   In case that any difference occurs, it will be treated as the difference of accounting estimates of the year when the shareholders' meeting is resolved.

3. Employees remuneration proposal passed by the Board of Directors:

   (1) The Company approved the distribution in the board meeting on February 26, 2021. The employee remuneration for 2020 was NT$6,000,000 and directors' remuneration would not be distributed. The aforesaid amounts of employee remuneration and directors' remuneration are consistent with the original estimated expenses in 2020, and there is no difference.

   (2) The amount of employee remuneration distributed by shares and its proportion to the sum of parent company-only or individual financial statement net profit after-tax and total employee remuneration for the current period: Not applicable.

4. Actual disbursement of employee bonus and remuneration to Directors for the preceding year (including employee stocks, cash disbursement and share prices). In circumstances where any differences between the actual distributed and recognized amount, the difference, reasons and handling of such matter shall be stated as follows:

On June 12, 2020, the shareholders' meeting approved NT$8,000,000 of employee remuneration for 2019, which would be paid in cash and the remuneration of directors and supervisors would not be distributed. There is no difference between the actual distribution situation and the amount approved by the shareholders meeting.

(IX) Share Repurchase by the Company

Count of share repurchase	1st meeting
Objective of repurchase	Transfer shares to employees
Buyback period	March 19, 2020 to May 18, 2020
Price bracket of shares repurchased	NT$ 25.41 to 91.73 per share
Type and number of shares repurchased	2,025,000 common shares
Amount of shares repurchased	NT$115,747,975
Amount of shares repurchased to Estimated number of shares repurchased (%)	50.63%
Shares written-off and transferred	0 share
Cumulative shares of the Company held	2,025,000 shares
Ratio of cumulative shares of the Company held to total issued shares (%)	2.18%

II. Issuance of corporate bonds (offshore corporate bonds included): None.

III. Preferred shares: None.

IV. Global depository receipts: None.

V. Subscription of warrants for employee: None.

VI. New employee restricted shares: None.

VII. Issuance of new shares regarding acquisitions of the other companies: None.

VIII. Implementation of the company's capital allocation plans: None.

Five. Overview of Business Operations

I. Description of the business:

(I) Description of the business:

1. Scope of business

2. Major business:

A. Basic Chemical Industrial

B. Other Chemical Materials Manufacturing

C. Industrial and Additive Manufacturing

D. Wholesale of Industrial Catalyst

E. Wholesale of Chemical Feedstock

F. Wholesale of Other Chemical Products

G. Retail Sale of Industrial Catalyst

H. Retail Sale of Chemical Feedstock

I. Retail Sale of Other Chemical Products

J. Electronics Components Manufacturing

K. Manufacture of Batteries and Accumulators

L. Fertilizer Manufacturing

M. Environmental Agents Manufacturing

N. Cosmetics Manufacturing

O. International Trade

P. Precision Chemical Material Manufacturing

Q. Waste Disposing

R. Waste Treatment

S. Wholesale of Fertilizer

T. Wholesale of Environmental Agents

U. Wholesale of Cosmetics

V. Retail Sale of Fertilizer

W. Retail Sale of Environmental Agents

X. Retail Sale of Cosmetics

Y. Synthetic manufacturing and domestic and foreign sales of oxalic acid

Z. Manufacturing and trading of organic, inorganic acids and other salts

AA. Manufacturing and trading of Rare Earths compounds and their crystals (except metals)

AB. All business items that are not prohibited or restricted by law, except those subject to special approval.

(2) Business weight of major products

Unit: NT$ thousand

Year / Product	2020	
	Net operating revenue	Weight (%)
Oxidation catalysts	902,585	17.08%
Power battery materials	2,587,291	48.95%
Fertilizer	775,903	14.68%
Specialty chemical materials	686,608	12.99%
Others	332,978	6.30%
Total	5,285,365	100.00%

(3) Current product (service) range

By the product and industry, the Company's major products may be categorized into the following seven categories:

①Oxidation catalysts

A. Cobalt acetate crystal/solution

B. Manganese acetate crystal/solution.

C. Cobalt manganese acetate solution.

D. Cobalt manganese acetate (bromine) solution.

E. Cobalt bromide solution.

F. Manganese bromide solution.

G. Recover the cobalt, manganese and bromine acetate solution.

②Power battery materials:

A. Nickel sulfate crystals.

B. Cobalt sulfate crystallization.

C. Electronic grade cobalt oxide

D. Battery grade cobalt oxide

E. Battery grade cobalt hydroxide

③Fertilizer

A. Straight fertilizer.

B. Compound fertilizer.

C. Contain organic compound fertilizer.

④Specialty chemical materials

A. Ceramic grade cobalt manganese oxide.

B. Ceramic grade cobalt oxide.

C. 98% sulfuric acid

D. Electronic grade sulfuric acid

E. Oxalic acid aqueous solution.

F. Chromium etching solution.

G. Potassium hydroxide / sodium hydroxide.

H. Cerium ammonium nitrate.

I. Sodium carbonate.

J. Cerium sulfate.

K. Stannous Chloride

L. Lanthanum carbonate.

M. Ammonium cerium nitrate

N. Cerium chloride.

O. Yttrium / neodymium / lanthanum / gamma / europium / cerium / samarium / samarium / niobium / porite / erbium / tungsten / bismuth oxide

P. Oxalic acid.

Q. Ammonium oxalate.

S. Potassium Dioxalate.

T. Potassium tetraoxalate

⑤Other chemicals

E. Reclaim waste sulfuric acid

F. Reclaim of waste ammonium sulfate.

4. New products development (service)

①Assist customers to establish a highly efficient catalyst reclaim system.

②R&D of new products

Develop new specifications to help customers improve their product characteristics and further expand the market.

③Continue to develop cathode materials for secondary lithium batteries:

The Company's secondary lithium battery cathode materials have been mass-produced and delivered and are currently cooperating with secondary lithium battery manufacturers to develop higher-end cathode materials.

④Reclaim waste sulfuric acid

⑤Develop the circular economy services.

2.Industry overview

(1). Current and future industry prospects

The Company is mainly engaged in the research and development, manufacturing and sales of oxidation catalysts and power battery materials. Its subsidiaries Heng I Chemical Co., Ltd. (hereinafter Heng I Chemical) and Uranus Chemicals Co., Ltd.| (hereinafter Uranus Chemicals focus on the production of chemical fertilizers, chemical raw materials and oxalic acid, respectively. The following describes the industry overview of the Company and its subsidiaries' main products, namely oxidation catalysts, power battery materials, fertilizers and specialty chemical materials:

①Oxidation catalysts

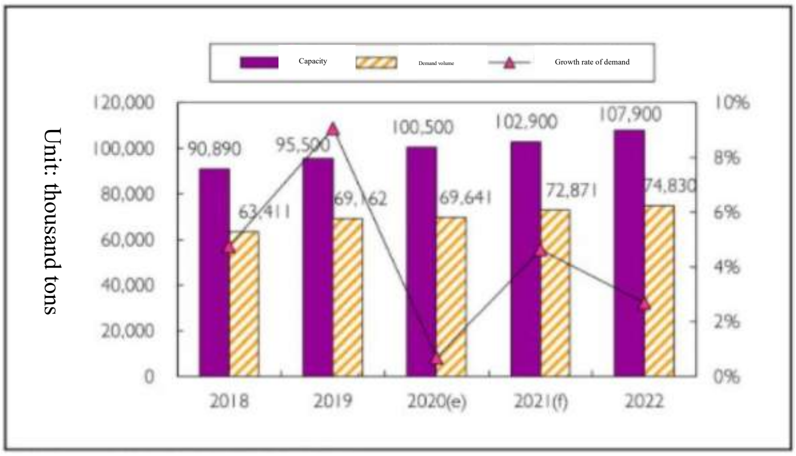
The Company's oxidation catalyst is used in the chemical fiber industry. The main products are cobalt manganese acetate (bromine) solution, crystalline cobalt acetate and manganese acetate. Cobalt manganese acetate (bromine) solution is an important catalyst raw material for the production of purified terephthalic acid (PTA); crystalline cobalt acetate and manganese acetate may also be used alone as a whitening agent and catalyst in the polyester process and are indispensable upstream raw materials for the polyester chemical fiber industry.

PTA is a derivative product of aromatic hydrocarbons. It is an important monomer of petrochemical raw materials. It belongs to the petrochemical intermediate product series, and Para-Xylene (hereinafter referred to as PX) is the main raw material. The PTA process is to oxidize the mixture of PX, acetic acid and catalysts solvent under high temperature and appropriate pressure, and then catalyze with pure water and catalyst to react with hydrogen; through a series of crystallization and separation processes for purification and refining, the PTA is obtained. In the PTA process, the catalyst plays a role in speeding up the reaction and improving production quality; it is also an indispensable raw material for the PTA process. Therefore, the supply and demand situation of the PTA industry closely influences the market demand for oxidation catalysts.

According to the IEK industry report, more than 90% of the world's PTA is used to produce polyethylene terephthalate (i.e, polyester; hereinafter referred to as polyester or PET) materials, which is an important raw material for the artificial fiber industry. Polyester is polymerized with PTA and ethylene glycol (EG), and then processed to produce polyester fiber or polyester pellets. Currently, the PTA produced is mainly used to produce polyester fibers for manufacturing non-woven fabrics, garment materials, tire cords and car seat belts. In contrast, polyester pellets are used in PET bottles, polyester films, media audio-video equipment, medical X-ray films and packaging materials, among other things.

(A) Overview of the global PTA industry

At present, the global PTA supply sources are mainly located in China, Taiwan, South Korea and other Southeast Asian countries; in particular, China's capacity and consumption are both No. 1 in the world. With China's economic growth, the demand for PTA has risen sharply every year. At that time, the high profits, high growth and the gap of market supply and demand attracted a massive investment and expansion boom, and thus the total capacity far exceeded that of other countries.



Source: ITRI IEK

With China's large-scale production expansion in recent years, the global PTA supply has greatly increased, exceeding the total global demand, resulting in overcapacity. However, PTA is an important raw material for artificial fibers and is widely used in daily life, such as textiles, packaging, electronics, and construction. According to ITRI IEK, the global demand for PTA in 2018 was 63,411 thousand tons, 69,162 thousand tons in 2019, 69,641 thousand tons in 2020, and 72,871 thousand tons and 74,830 thousand tons are expected for 2021 and 2022, respectively. In the next few years, the global demand for PTA will continue to grow.

(B) Overview of the domestic PTA industry

The domestic PTA is led by three major companies, namely Formosa Chemicals & Fibre Corporation (Stock code: 1326, “FCFC”), Oriental Petrochemical (Taiwan) Co., Ltd., and China American Petrochemical Co., Ltd. In recent years, due to the rapid increase in China's capacity and the slowdown in market demand for PTA, major domestic PTA manufacturers have responded to the market's excess supply by reducing production and closing plants.

According to the Taiwan Industry Economics Services of TIER, only a few petrochemical raw materials such as paraxylene (PX), ethylene glycol (EG), and acrylonitrile (AN) have high export proportions in the domestic bulk petrochemical raw materials. China's polyester capacity continued to expand in 2018. In Vietnam and India, the import demand for artificial fiber raw materials increased, so the petrochemical raw material export ratio rose to 27.71% in that year. In 2019, China's polyester capacity continued to expand, and India and Vietnam's demand for Taiwan's PTA and EG increased significantly, resulting in the output ratio 2019 increase to 27.91%.

According to the statistics of the Petrochemical Industry Association, in the beginning of 2020, due to the impact of the COVID-19 pandemic and the plunge of international oil prices, although the pandemic and oil prices stabilized in the second half of the year, the domestic production volume of 27.8 million tons was still 2.4% lower than that in 2019. The export volume was 10.55 million tons, a decrease of 5.7% comparing to 2019, and the output ratio was 37.95%.

Sources: Petrochemical Industry Journal, Taiwan Industry Economics Services, TIER

Note: Output ratio = output volume/production volume.

②Power battery materials

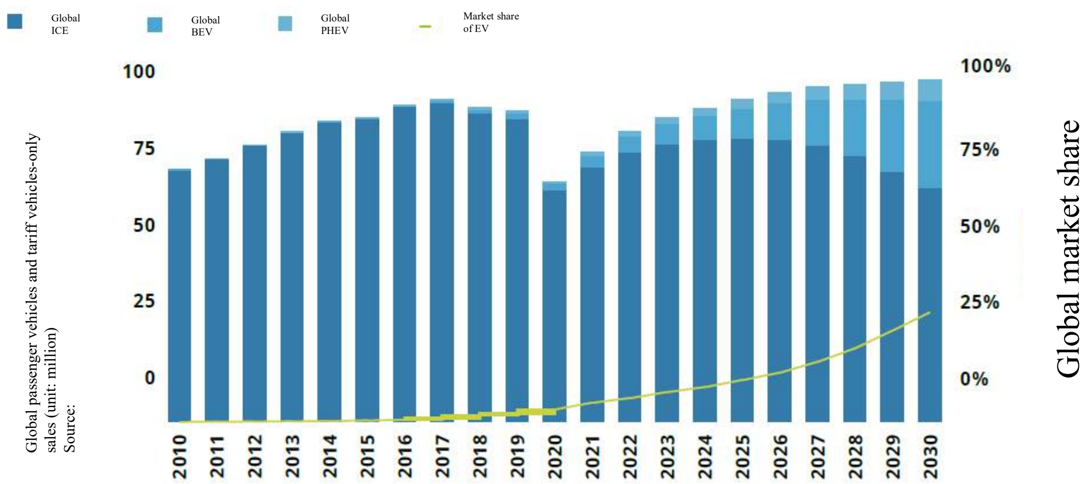
In recent years, the awareness of environmental protection has been highly valued by the international community. Hybrid or pure electric vehicles are the future development trend of automobiles. According to the estimation of the energy consulting agency Wood Mackenzie, the impact of the COVID-19 pandemic in 2020 and low oil prices prompted the delay of fleet procurement, making the global electric vehicles sales were expected to decline 1.3 million units or drop by 43% from 2019. However, the advanced countries in the world have already listed the development of electric vehicles and new energy vehicles as important policies. For example, new regulations on European environmental emission standards have announced that the combustion vehicles will be prohibited from producing or sell gradually from 2030. The United Kingdom also announced at the end of 2020 that the ban on the sale of new combustion vehicles was advanced from 2040 to 2030. And China has set a goal of 25% of new energy vehicles in new vehicle sales in 2025 and has actively promoted the construction of vehicle charging facilities.

In addition to policy promotion, the decline in the average price per kilowatt-hour (USD/KWh) of electric vehicle power battery packs has also increased the competitiveness of electric vehicles and consumer acceptance. According to a research report by Bloomberg NEF, the average price per kWh of electric vehicle battery modules in 2010 was US$1,100. In 2020, the average price per kWh of electricity in the market was US$137, a decrease of 87%. Bloomberg predicts that in 2023, the price of power batteries will drop to about $100 per kWh. In this price range, automakers will have the opportunity to produce electric vehicles with the same cost as combustion vehicles, which will be more attractive to consumers

In addition, as carbon reduction has gradually become an important issue, except that the governments and related institutions are discussing policies related to carbon reduction, many companies are also accelerating the deployment of electric vehicles, and some companies have begun to gradually replace their combustion vehicles with EVs. The courier company, FedEx, committed in March 2021 that half of the new vehicles purchased by the company 2025 would be electric vehicles, and in 2030 all-new vehicles purchased would be electric vehicles.

Deloitte pointed out in the 2021 Auto Industry Trends and Outlook that the total sales of electric vehicles will increase from the estimated 2.5 million units in 2020 to 11.2 million units in 2025 and 31.1 million units in 2030.

Annual sales of electric passenger vehicles and light commercial vehicles

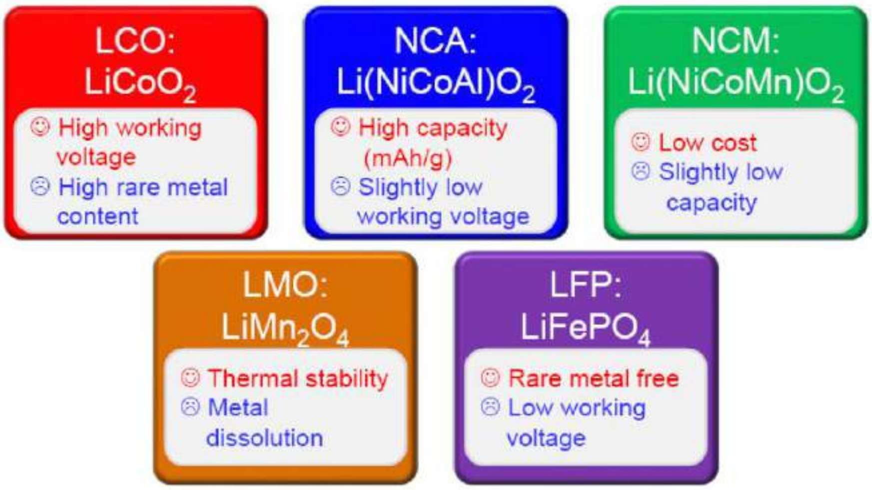


Source: Deloitte analysis, HIS Markit. EV-Vloumes.com

The power battery is a battery specifically used for electric vehicles. At present, the mainstream power battery is a lithium-ion battery. Among them, the ternary lithium-ion battery has a dominant position in the field of power batteries with a market share of 60% to 70%. The power batteries account for nearly 40% of the electric vehicle costs, which is the largest proportion, and the growth of electric vehicles has driven the demand for power batteries. Compared with traditional consumer electronics applications, power batteries emphasize endurance, weight, and instant power output. They have higher requirements for energy and power density and continue to evolve the selection of battery materials. More and more battery suppliers are investing in development. The battery use of electric vehicles is much higher than that of 3C products, which also drives the demand for lithium batteries to grow substantially.

Lithium-ion batteries are conducted through lithium electrons, and the key raw materials used are cathode materials, electrolytes, anode materials and separators. Currently, the mainstream cathode materials for lithium-ion batteries on the market may be divided into lithium cobalt batteries (hereinafter referred to as LCO), lithium manganese batteries (hereinafter referred to as LMO), ternary lithium cobalt nickel aluminum batteries (hereinafter referred to as NCA), ternary lithium nickel manganese cobalt battery (hereinafter referred to as NCM) and lithium iron phosphate battery (hereinafter referred to as LFP). The power battery materials produced by the Company are mainly used as cathode materials for ternary lithium batteries (NCA and NCM).

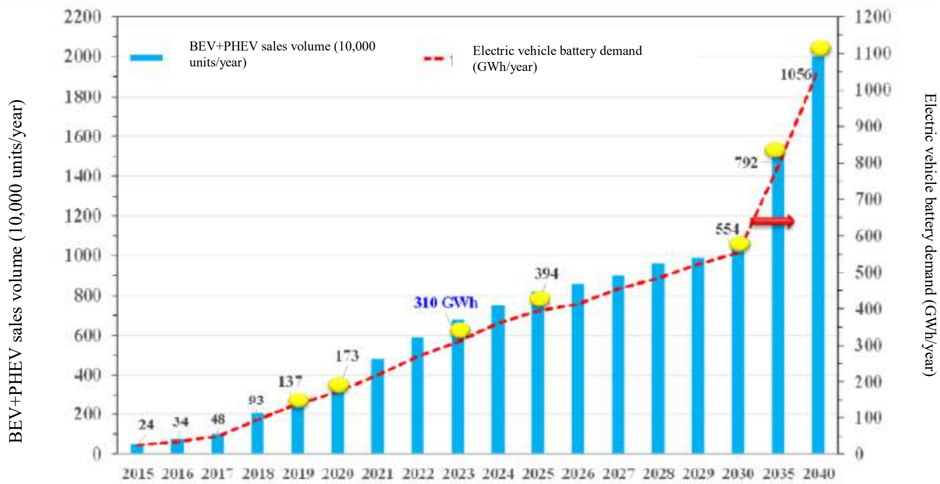
Comparison of the characteristics of lithium battery cathode materials



Source: Panasonic

The Material and Chemical Research Laboratories of ITRI presumes that in 2030, the demand for lithium batteries for electric vehicles will reach 554GWh, which is 12 times the global demand for lithium batteries for electric vehicles in 2017. According to Global Market Insights' statistics, the global lithium-ion battery market exceeded USD 24 billion in 2015 and is expected to grow by about 17% annually from 2017 to 2024 and reach USD 93 billion in 2025.

Analysis of global demand for power lithium batteries



Source, Survey of Advanced Technologies of Japan (2017);
Material and Chemical Research Laboratories of ITRI (2018)

③Fertilizer

Fertilizers are divided into straight fertilizers and compound fertilizers. Straight fertilizers are manufactured from a single component of nitrogen, phosphorus, and potassium, such as uric acid, ammonium sulfate, potassium chloride, potassium sulfate and superphosphate, which have been affected by domestic fertilizer rationalization policies in recent years that led to a decline in domestic fertilizer demand. According to the industrial production, sales and inventory movement survey conducted by the Department of Statistics, MOEA, the total sales of fertilizer-ammonium sulfate in 2020 fell from 585,809 tons in 2017 to 339,195 tons, representing a compound annual decline rate of approximately 8.45%. However, chemical fertilizers still have a certain market due to their high nutrient content and are suitable for various soils and plants.

Compound fertilizers are manufactured by mixing nitrogen, phosphorus, and potassium components. Different compound fertilizers are selected according to the needs of planting crops, soil, and nutrients. In the domestic fertilizer market, Taiwan fertilizer takes the share nearly 70%, whose fertilizer products are sold domestically as much as 99%. According to the industrial production, sales and inventory movement survey conducted by the Department of Statistics, MOEA, in recent years, the domestic fertilizer market has become stable and saturated with little change. Fertilizer companies are also actively expanding the export market. In 2020, the weight of export of other compound fertilizers grew gradually to 18.45% from 16.94% in 2017.

Statistics on the production and sales of ammonium sulfate (straight fertilizer) in Taiwan from 2016-2020

Unit: tons; %

Year	Production volume	Annual increase (decrease)	Sales volume	Annual increase (decrease)	Weight of export
2016	531,439	13.45	480,678	16.38	0.00
2017	668,561	25.80	585,809	21.87	0.00
2018	640,019	(4.27)	572,479	(2.28)	0.00
2019	546,046	(14.68)	484,475	(15.37)	0.00
2020	384,749	(29.54)	339,195	(29.99)	4.86

Source: Department of Statistics, MOEA

Statistics on the production and sales of other compound fertilizers and nitrogen compounds in Taiwan from 2016-2020

Unit: tons; %

Year	Production volume	Annual increase (decrease)	Sales volume	Annual increase (decrease)	Weight of export
2016	1,033,895	1.73	1,055,719	4.38	17.53
2017	1,056,529	2.19	1,111,393	5.27	16.94
2018	1,035,566	(1.98)	1,132,393	1.89	16.99
2019	974,824	(5.87)	1,071,913	(5.34)	17.06
2020	1,035,012	(6.17)	1,115,622	(4.08)	18.45

Source: Department of Statistics, MOEA

④Specialty chemicals and others

Main specialty chemical materials produced by the Group include cobalt hydroxide, sulfuric acid and oxalic acid.

(A) Cobalt hydroxide

The cobalt hydroxide products produced by the Company are the main raw materials of the chemical material, Metal Carboxylates, whose end application is the adhesion promoters for the rubber and steel wire belt in the tire industry, so they are closely related to the production and sales of the tire market. In recent years, the Sino-US tire trade frictions have intensified. Moreover, in May 2018, the European Union determined that truck and bus tires imported from China were dumping and imposed temporary anti-dumping duties. This is detrimental to the performance of Chinese tire exports to the European market. Therefore, China has expanded exports to other Asian countries. The Asian tire market has been facing the challenge of oversupply of tires, which affected domestic tire production and sales in 2018. However, the partial order shift effect in the European and the U.S markets are positive to the export of Taiwan's tire industry. As shown in the following table, the proportion of export sales of the tire manufacturing industry from 2016 to 2020, has been gradually increasing from 71.46% to 76.5%, and the proportion of export sales in domestic tire manufacturing has shown a slow upward trend.

Statistics of Taiwan's tire manufacturing production and sales volume from 2016-2020

Unit: thousand pieces; %

Year	Production volume	Annual increase (decrease)	Sales volume	Annual increase (decrease)	Weight of export
2016	21,322	(3.73)	21,446	(2.84)	71.46
2017	22,653	6.24	22,106	3.08	75.04
2018	20,672	(8.74)	20,953	(5.22)	75.29
2019	22,074	6.78	22,031	5.14	76.91
2020	21,662	1.87	21,669	(1.64)	76.5

Source: Product statistics, Department of Statistics, MOEA

(B) Sulfuric acid

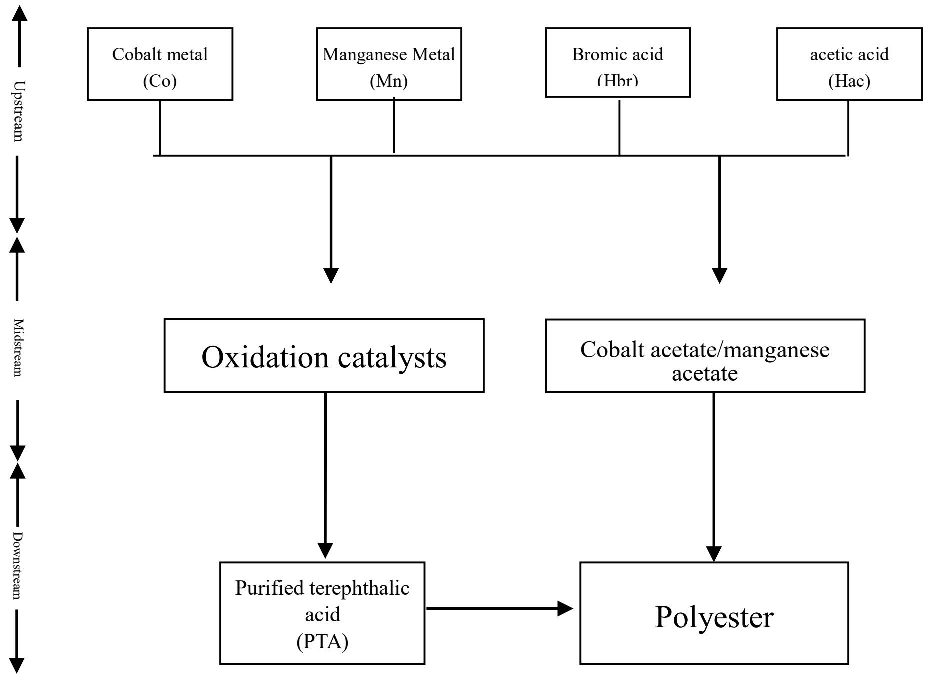
Heng I Chemical, a subsidiary of the Company, is engaged in the recovery of 98% sulfuric acid, electronic grade sulfuric acid and waste sulfuric acid. In recent years, the dumping of imported sulfuric acid has impacted the price of sulfuric acid in the domestic market. Because the price-cutting competition of imported sulfuric acid cannot be weathered, the Company has developed electronic-grade sulfuric acid to avoid the red sea market of price-cutting competition. Comparing to the 98% sulfuric acid, electronic grade sulfuric acid has the main advantages of higher production process safety, high product purity and low impurity ion content, which is suitable for the production of semiconductor circuits.

(C)Oxalic acid

The oxalic acid produced by the Company's subsidiary, Uranus Chemicals, is mainly divided into industrial oxalic acid and refined oxalic acid. Industrial oxalic acid is used in pharmaceuticals, separation and purification of rare earth elements, fine chemicals, textile printing and dyeing and other industries The refined oxalic acid, on the other hand, is the high-purity oxalic acid product generated by refining of industrial oxalic acid, and used in the fields of PTA catalyst recovery, circuit and electronic product cleaning, cobalt salts, electronic ceramics, magnetic materials, alloy powder materials and lithium battery cathode materials.

(2) Links between the upstream, midstream, and downstream segments of the industry

①Oxidation catalysts



(A) Upstream industry

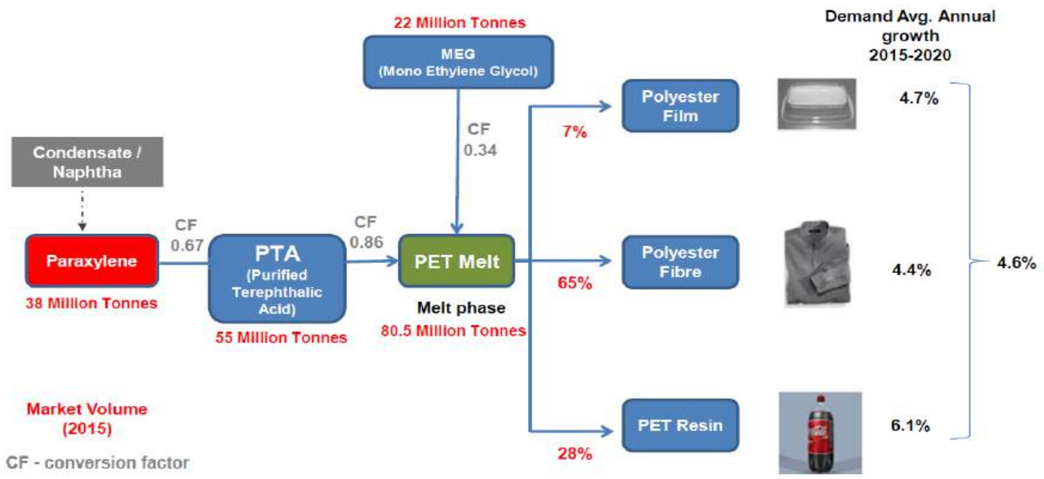
The raw materials for the production of the oxidation catalyst are mainly cobalt metal, manganese metal, hydrobromic acid and acetic acid. The main products are cobalt manganese acetate (bromine) solution and crystalline cobalt acetate and manganese acetate. Since there are no domestic mineral resources of cobalt metal and manganese metal, the raw material must be completely imported. The global cobalt metals are mainly distributed in Africa (Congo, Zambia, and Morocco), Australia and China. The cobalt metal is obtained through extracting from nickel ore and copper ore, with only about 2% content. The risk of this raw material is a supply issue. If the raw material is purchased from a single or very limited number of suppliers, it is possible that the supplier's plants may be unexpectedly shut down, and annual services will result in insufficient supply; the fluctuations in crude prices and petrochemical raw materials prices will also directly affect the price of PX, the upstream raw material of PTA, and therefore also affects the cost of PTA's raw materials.

(B) Midstream industry

90% of the global PTA is used in the production of PET. PET is processed into polyester fiber or pelletized into polyester pellets. The main operational risks of PTA are the supply and demand in the international market and the situation of foreign anti-dumping investigations. In recent years, China has released significant PTA capacity, which has caused a serious imbalance between supply and demand in the global market, which in turn has also squeezed out the output of Taiwan's PTA suppliers. Until the large Chinese manufacturers have implemented a joint production reduction strategy, and some PTA companies have suspended work due to certain reasons in 2015, the problem of PTA supply imbalances that affected both upstream and downstream industries was mitigated. In a nutshell, the PTA industry is deeply affected by the supply and demand situation in the international market, and if any country implements anti-dumping investigations will directly affect the production and sales of Taiwan's PTA industry.

(C) Downstream industry

PTA downstream application



Source: ICIS; ITRI IEK (Sep 2016)

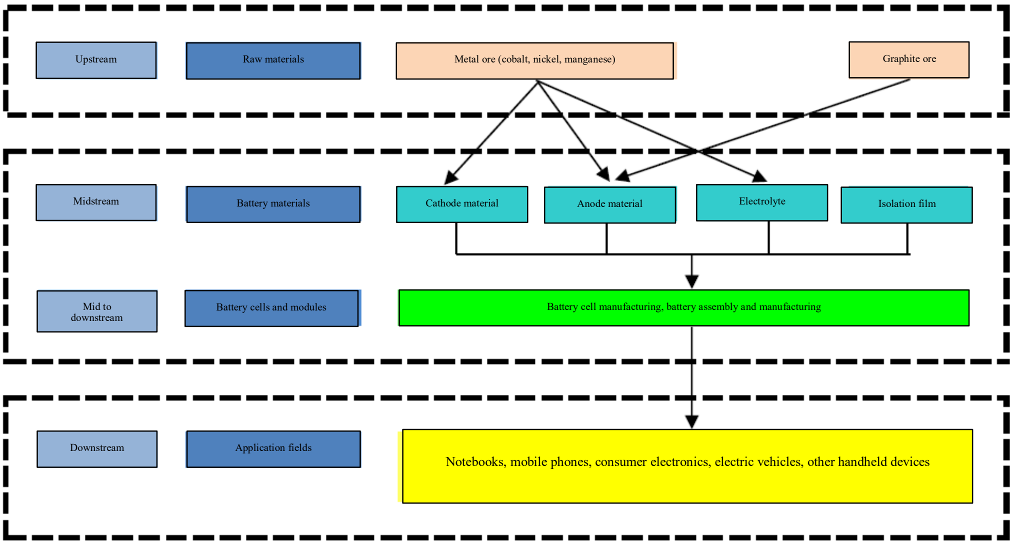
PET series are divided into two categories: polyester fiber and polyester pellets. Polyester fibers are mainly used in the production of civilian clothing, non-woven fabrics, garment materials, tire cords and car seat belts. In contrast, polyester pellets are used in PET bottles, polyester films, media audio-video equipment, medical X-ray films and packaging materials, among other things.

Downstream products provide huge demands for PTA raw materials. If the downstream industry expands production, it will drive the increase in PTA demand at the upstream and midstream. For example, the recovery of the Vietnamese textile industry in 2016 drove the import demand for raw materials in the upstream and midstream. Still, if the domestic downstream processing industry moves abroad, it will also directly affect the demand for domestic raw materials.

Based on the research report of the Industrial Economics Database of the Taiwan Economic Research Institute, it is expected that the orders from downstream apparel brands will show a slight increase, which will help to drive the demand of the textile industry. In addition, the industry players are actively deploying high value-added processed silk products, so the demands for functionalities and the processed silk products with special specifications are expected to grow optimistically, and it will also help the demand for upstream and midstream raw materials.

②Power battery materials

Industry structure of battery materials



Source: complied by Grand Fortune Securities

(A) Upstream industry

The raw materials required for cathode materials are mainly mineral resources such as cobalt metal, nickel metal, manganese metal and iron metal, which are mainly concentrated in Africa, Australia and South America. Among them, the Company's main purchase of raw materials is mainly cobalt metal and nickel metal. As all domestic raw materials must rely on imports, the operating risk is the price fluctuation in the international raw material market. The Company maintains a good relationship with suppliers and signs supply contracts. If the quantity is insufficient, it will be purchased in the spot market, and there is no risk that may affect the operation.

(B) Midstream industry

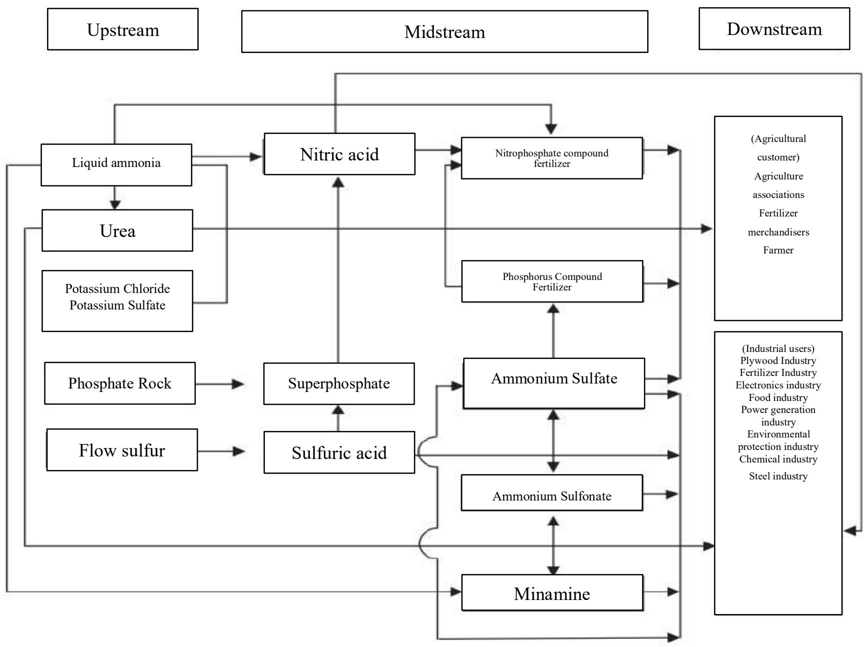
The midstream products of the battery materials include battery cell modules, power component modules, battery charging systems, power motor modules, vehicle electrical component modules, smart vehicle electrical systems and other components, battery systems, power supply related and other peripheral components. As lithium battery modules and battery management systems directly affect the overall battery operation efficiency and safety, global automakers mostly obtain core battery technologies through self-investment, mergers and acquisitions, and technical cooperation to expand battery capacity for meeting their own electric vehicle production needs.

(C) Downstream industry

Lithium batteries are widely used, mainly in 3C products and electric vehicles. Downstream operational risks are mainly the rise of new business models and national policy factors. Due to the global emergence of new business models such as separation of vehicle and power, battery leasing, and car sharing, it is favorable to expanding the penetration of the electric vehicle market and driving the demand for downstream products in Europe and China, including electric buses, electric vehicles, electric scooters and golf carts. In terms of national policies, for example, advanced countries have successively launched electric vehicle subsidy programs, and China has also introduced vehicle purchase subsidies, tax reductions, R&D support, consumer incentives, and imposed the "Key Special Implementation Plan under the National Key R&D Program for New Energy Vehicle." The international forecasting agency, IHS Markit, predicts that the global pure electric vehicle will reach 10 million units in 2025, accounting for 9.7% of the global auto market. The downstream electric vehicle industry is booming, which will simultaneously drive the demand for lithium batteries in the upper and midstream.

Overall, although the domestic industry is not complete, the government actively guides and assists industry players in research and development. The upstream industry should gradually establish its required foundation. In the future, once the upstream, midstream and downstream industry players master the relevant technologies, it will be beneficial to the development of domestic lithium batteries and peripheral industries.

③Fertilizer



The Company's subsidiary, Heng I Chemical, mainly purchases potassium chloride and urea. Due to the lack of fertilizer raw materials in Taiwan, almost all purchases of material must rely on overseas imports. Therefore, price fluctuations in the international market will easily affect the cost of raw materials. The Company's subsidiary, Heng I Chemical, maintains a good cooperative relationship with its suppliers and signs supply contracts every year to ensure sufficient supply.

Fertilizers are closely related to people’s livelihood and farming. Due to the continuous growth of the global population, climate change, and the liberalization of agricultural product trade, the demand for food farming has increased. However, after the government joined the WTO, the opening of agricultural product importation has affected Taiwan’s agricultural development. Combining the government’s farmland fallow policy, the domestic arable land area has been gradually decreasing, resulting in a trend of decreasing fertilizer demand year by year. Due to the long-term government constraints on domestic fertilizer prices, lack of labor in rural areas and rising wages, and mechanized farming replaces manpower, the demand for compound fertilizers is increasing year by year, and the demand for straight fertilizers is shrinking year by year. The domestic compound fertilizer industry is fiercely competitive

The main downstream operating risk is the market demand factor. In order to promote domestic organic agriculture and maintain the production environment, improve the soil fertility of farmland, encourage farmers to apply organic compound fertilizers, and reduce the amount of chemical fertilizers, the Council of Agriculture, Executive Yuan launched a new agricultural program, initiating a number of environmentally friendly farming fertilizer subsidy measures. Under the promotion of rational fertilization and organic fertilizer policies, the domestic application of chemical fertilizers has declined. However, because chemical fertilizers still have a good effect on planting crops, the impact on the fertilizer demand impact should be limited in the short term.

④Specialty chemicals and others

The upstream raw material of the cobalt hydroxide produced by the Company is cobalt metal. Because cobalt metal is a strategic metal, it is mainly distributed in Africa, America, Australia and China. The Company signs contracts with suppliers to reduce the risk of price fluctuations when purchasing cobalt metal. The midstream is the production of metallic cobalt soap. The Company’s downstream end application is mainly the adhesion promoters to rubber and steel wire belt. The operating risk is affected by the supply and demand of the downstream tire industry. In recent years, the Sino-US tire trade friction has been intensified, coupled with the temporary anti-dumping duties imposed by the European Union on China, to crack down on oversupply in the Chinese market, resulting in a slowdown in the supply in the Chinese market. However, Taiwanese companies have benefited from the relief of the crowding-out effect of Chinese supply, and the tire industry's export volume has begun to grow, which has also driven upstream demands of advanced materials.

For the Company’s subsidiary, Heng I Chemical’s electronic grade sulfuric acid, the major operating risk is affected by the needs of end customers. Its major client is Taiwan Mitsubishi Chemical, and ultimately providing electronic grade sulfuric acid for TSMC’s high-end processes. Since TSMC has successively plant expansion plans and capacity demands, electronic grade sulfuric acid production demand is further increased.

The Company's subsidiary, Uranus Chemicals, produces industrial oxalic acid, which is used to produced various chemical products such as oxalate, oxalate, oxalamide, dyes, and to separate and purify pharmaceuticals and rare earth elements. It is mainly used in the chemical engineering industry, textile industry and electronics industry. As the rare earth separated by oxalic acid are widely used in energy, chemical materials, energy-saving, and environmental protection, aviation, aerospace, and electronic information fields, when technologies continue to evolve, the demand for rare earth gradually increases; therefore, the application demand for oxalic acid will also increase, too.

(3) Product development trend and competition

①Oxidation catalysts

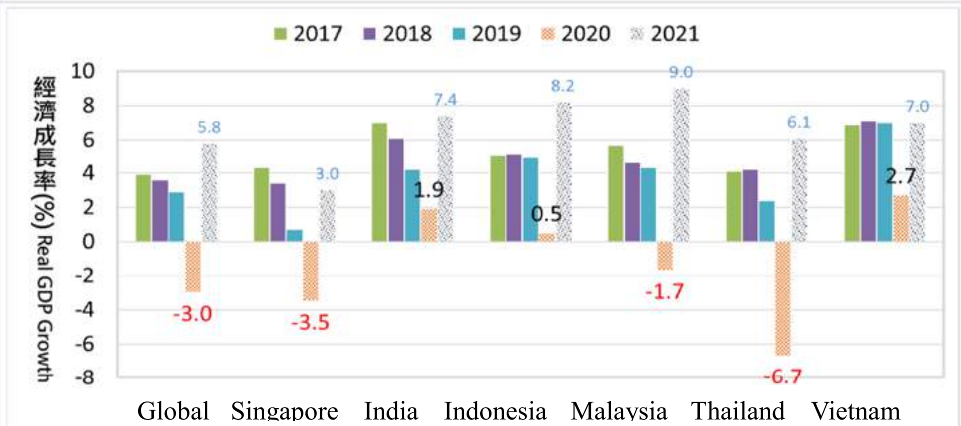
(A) Short-term regional demand

If a petrochemical plant encounters annual services, environmental controls or accidents that cause the production line to temporarily suspend, it often results in a shortage of petrochemical raw materials in the region, which will also shift the demand for such raw materials to neighboring regions, thereby increasing the demand for petrochemical raw materials in neighboring regions. For example, in 2019, FCFC’s Mailiao plant was forced to suspend due to the rupture and explosion of the pipeline, which mitigated the oversupply resulted from petrochemical raw material capacity. In recent years, China has enhanced the environmental controls, and some Chinese PTA capacities were forced out of the market. The slowing down supply from China also benefitted Taiwan.

(B) Regional economic development drives PET demand

90% of PTA is used to produce PET. Its end industry is artificial fiber raw material manufacturing. Its products include ready-to-wear materials, non-woven fabrics, tire cords, car seat belts, PET bottles, media audio-video equipment, medical X-ray films and packaging materials, among other things. As the PTA industry meets a huge demand for the downstream industry of artificial fibers, if the downstream industry expands the plants, it will drive the demand for the upstream artificial fiber raw materials industry to increase. The demand for PET is highly correlated with economic development. Based on the estimates from International Monetary Fund (IMF), the global GDP in 2020 showed a negative growth rate. The average GDP growth rate of developing countries in Asia was about 1%; compared to 2018, the decline is more than 5% to 6%. However, Vietnam's GDP is able to maintain a growth rate of 2.7%,and it shows that the demand for PET has continued. This has led to the gradual expansion of the Vietnamese textile industry in recent years, which has driven the demand for raw materials to the artificial fiber raw material industry upstream. Based on the statistics of the Taiwan Textile Federation, the proportion of the export value of the artificial fiber raw material industry in 2019 rose to 24.25%.

Economic growth of the new southbound countries after the pandemic



Source: IMF

②Power battery materials

(A) Cost and performance are extremely important

Lithium batteries are mainly composed of four categories, namely cathode materials, anode materials, electrolytes and separators. The cathode materials account for about 30% of the product cost of lithium batteries. Since the selection of cathode materials requires taking into account energy density, power density, applicable voltage range, stabilizing effect of electrolyte, reversible electrochemical reaction, and other conditions, cathode material is used as not only the battery material participating in the reaction of lithium battery, but also the main source of lithium ions in the battery. Its activity and the distribution of lithium ions are the most critical factors affecting the lithium battery performance.

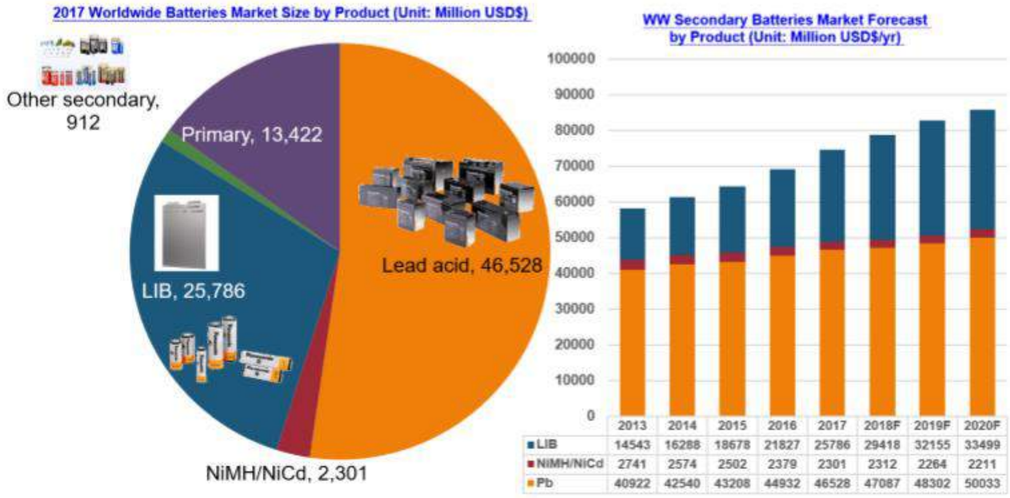
The cathode material of lithium battery may achieve further safety, capacity and cost requirements by adding nickel and manganese. Depending on the added materials, it can be divided into ternary systems of NCA and NCM, and binary systems of lithium, cobalt and nickel materials. The global cathode material industry is also striving for the R&D and improvement of cathode materials that have the advantages of safety and capacity. Therefore, the future development of cathode materials has a promising prospect.

(B) Increase in global market demand

In recent years, global lithium battery material plants have been deployed in the automotive market. They are mainly optimistic about the battery application and demand for hybrid electric vehicles (HEV) and electric vehicles (EV). In recent years, the awareness of environmental protection has been highly valued by the international community. The advanced countries in the world have already listed the development of electric vehicles and new energy vehicles as important policies. For example, new regulations on European environmental emission standards have announced that the combustion vehicles will be prohibited from producing or sell gradually from 2030. And China has set a goal of 25% of new energy vehicles in new vehicle sales in 2025 and has actively promoted the construction of vehicle charging facilities. The total number of charging piles in China has reached 1.22 million by the end of 2019. It is estimated that about 200,000 public piles and more than 400,000 private piles will be added in the whole year of 2020. In addition, according to a survey by the research institute IHS Markit, it is estimated that the demand for electric vehicles in the United States will increase to 1.28 million units in 2026. The market share of electric vehicles in the U.S. auto market will increase to 7.6%. For Taiwan’s electric vehicles, as the electric buse continue to be exported to Japan, Southeast Asia, India and other markets in 2020, it is estimated that Taiwan’s electric vehicle sales would expand in 2020 comparing to 2019.

In addition, according to the ITRI IEK lithium battery material development and analysis report and the 2018-2020 global lithium battery market review and outlook, an HEV uses more than 20 times the number of batteries than a laptop, and the number of batteries used by an EV is more than 1,000 times of a laptop. Based on the global battery industry's market scale and future growth forecasts for different technologies, it is estimated that the lithium battery market will reach USD33.5 billion by 2020, and its market growth rate is much higher than other battery technologies.

Global battery industry's market scale and future growth forecast for different technologies

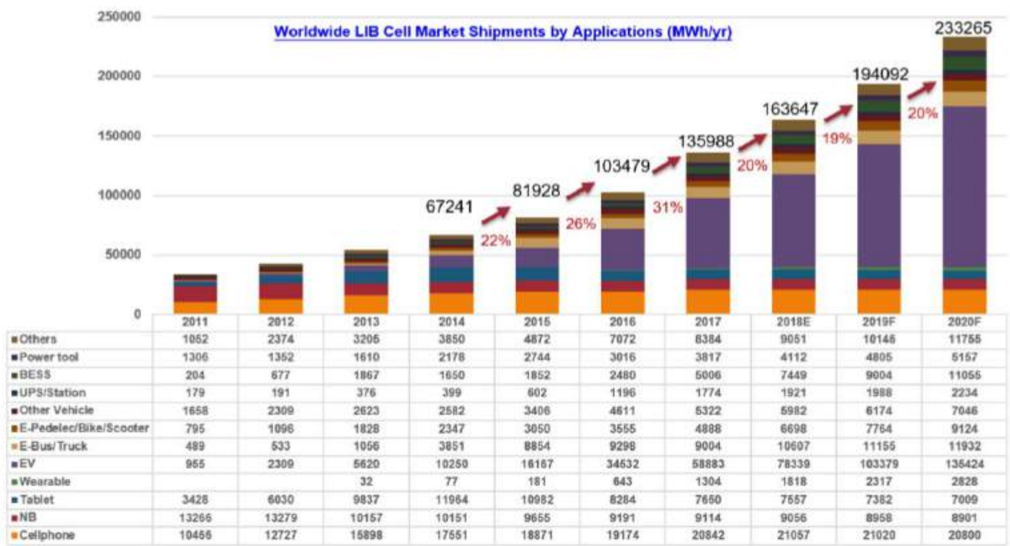


	2013	2014	2015	2016	2017	2018F	2019F	2020F
LIB	14543	16288	18678	21827	25786	29418	32155	33499
NiMH/NiCd	2741	2574	2502	2379	2301	2312	2264	2211
Pb	40922	42540	43208	44932	46528	47087	48302	50033

Source: IEK (2018)

In response to the global new energy vehicle promotion strategy, the shipments of electric vehicles and electric buses have grown significantly, stimulating the global lithium battery application market shipments to continue to grow from previous years. The global output in 2020 is estimated to be about 233 GWh in terms of electric capacity, with an annual growth rate of about 20%, showing stable growth. In light of the huge demand in the HEV and EV markets, the future applications and demands of cathode materials are expected to continue to increase.

Distribution of global lithium-ion battery shipments in different application markets (MWh/year)



	2011	2012	2013	2014	2015	2016	2017	2018E	2019F	2020F
Others	1052	2374	3206	3850	4872	7072	8384	9051	10146	11755
Power tool	1306	1352	1610	2178	2744	3016	3817	4112	4805	5157
BESS	204	677	1867	1650	1852	2480	5006	7449	9004	11055
UPS/Station	179	191	376	399	602	1196	1774	1921	1988	2234
Other Vehicle	1658	2309	2623	2582	3406	4611	5322	5982	6174	7046
E-Pedelec/Bike/Scooter	795	1096	1828	2347	3050	3555	4888	6698	7764	9124
E-Bus/ Truck	489	533	1056	3851	8854	9298	9004	10607	11155	11932
EV	955	2309	5620	10250	16167	34632	58883	78339	103379	135424
Wearable			32	77	181	643	1304	1818	2317	2828
Tablet	3428	6030	9837	11964	10982	8284	7660	7557	7382	7009
NB	13266	13279	10157	10151	9655	9191	9114	9056	8958	8901
Cellphone	10466	12727	15898	17551	18871	19174	20842	21057	21020	20800

Source: IEK (2018)

③Fertilizer

Taiwan's fertilizer manufacturing industry is domestically oriented. As Taiwan's domestic fertilizer market has become saturated with little change, Taiwan's fertilizer industry players are actively expanding overseas markets. The launch of a new agricultural program by the Council of Agriculture, Executive Yuan has led to a decline in the volume of chemical fertilizers used in Taiwan. However, as China has strengthened environmental inspections, the supply of nitrogen fertilizer in China has decreased, which will help reduce the export competition of this industry.

④Specialty chemicals and others

(A) Cobalt hydroxide

a. Elevation of tire quality requirements

The global automotive industry is booming, and various automakers have introduced new models. Safety is one of the advertised selling points of most models. As consumers pay more attention to driving safety, explosion-proof safety tires have gradually become popular among consumers. According to the National Highway Traffic Accident Statistics from 2015 to 2019 released by Freeway Bureau, MOTC, tire blasting accounted for 5.5% of the cause of traffic accidents, ranking sixth in the cause of accidents. Because the quality of metal cobalt soap affects the adhesion performance between natural rubber and steel wire belts, it also indirectly affects the safety and quality of tires. As the global tires develop towards high performance and high safety, the use of metallic cobalt soap becomes more important, which will also drive the quality and demand for advanced material applications.

b. The impact of trade protectionism

In recent years, Chinese tires have faced many anti-dumping investigations from all over the world. In May 2018, the European Union determined that truck and bus tires imported from China had dumping activities and imposed a six-month temporary anti-dumping duty. The initial anti-dumping duty rate was 29.1% to 68.8%, unfavorable for China’s tire exports to the European market. In July 2018, the China-US trade frictions intensified. The US$200 billion product tax list imposed by the US included automobile tires. Since the US is the largest importer of Chinese tires, and the export value accounted for 14%, China’s tire exports to the United States will face another wave of recession risks. Taiwan will benefit from this, and the crowding out effect from China’s competition is mitigated to increase Taiwan’s export ratio. Therefore, the United States’ policy approach towards China’s tire export plays an important role for Taiwan exports. The proportion of Taiwanese tire exports is expected to grow in the future, and at the same time, it will drive the Company's production demand for metal cobalt soap.

(B) Sulfuric acid

Electronic grade sulfuric acid is a high-purity sulfuric acid, which is widely used in semiconductors, large-scale integrated circuit assembly and processing. It is mainly used for cleaning and etching wafers to effectively remove impurity particles on the wafers. The electronic grade sulfuric acid end customer of the company's subsidiary, Heng I Chemical, is a semiconductor manufacturer. With the rapid development of technology, their high-end manufacturing process has been researched and developed and expanded. The expansion of capacity will drive the demand for electronic grade sulfuric acid. Therefore, the demand for this product is still expected to improve in the future.

(C) Oxalic acid

Industrial oxalic acid is mainly used in the chemical, printing and dyeing and textile industries. After refining, the refined oxalic acid is obtained. Its end applications are extremely wide. It is used for PTA catalyst recovery, cleaning circuits and electronic products, cobalt salts, electronic ceramics, magnetic materials, alloy powders, and cathode materials of lithium batteries. With the continuous advancement of technologies, the demand for rare earth has gradually increased. As there are fewer manufacturers of oxalic acid and rare earth in Taiwan, Uranus Chemicals, a subsidiary of the Company, can also benefit.

3. Technological capability and R&D overview

(1) The technical level and research development of the business

The Company's business is the research and development, production and sales of chemical materials, focusing on oxidation catalysts, power battery materials, fertilizers, specialty chemicals and other chemical materials. The Company started with the production of oxidation catalyst products. The products are cobalt manganese acetate (bromine) solutions and cobalt acetate/manganese crystals, which are the key raw materials for the production of purified terephthalic acid (PTA), which plays a role in accelerating the reaction rate and improving the quality of production. The purified terephthalic acid (PTA) is processed to produce polyester, which is mainly used for polyester fiber. It is one of the three major artificial fibers and belongs to the chemical fiber industry. For power battery materials, the Company's nickel sulfate, cobalt oxide, and cobalt sulfate are raw materials for battery cathode materials, which are used in the lithium-ion battery industry. For the fertilizer, the compound fertilizer products produced by the company's subsidiary, Heng I Chemical, are mainly mixed and processed with raw materials such as urea, potassium chloride, ammonium sulfate, ammonium phosphate, nitrogen and phosphorus fertilizers, and are used in the agricultural industry. Specialty chemical material products include electronic grade sulfuric acid, cobalt hydroxide, oxalic acid, rare earth and etching solutions, with a wide range of products involving semiconductor, electronics, tires, biotechnology and other industries, with a wide range of applications.

The Company's R&D department continues to improve the production process and recycling technology of PTA oxidation catalysts. With years of understanding the characteristics of cobalt and nickel metals, and production experience, it continues to develop products in the fields of power battery materials, specialty chemical materials, and refine the production process while maintaining product quality and creating products that meet customer requirements, including controlling the weight of raw materials, complete product particle structure, and consistent size and specifications. The product characteristics are fully grasped to provide customers with more diversified products, meeting their needs.

(2) R&D personnel and their educational/ professional background

Unit: person

Item/Year		2017	2018	2019	2020
Number of personnel at the beginning of the period		9	7	9	8
New employees		4	3	2	3
Resigned employees		1	1	2	—
Severed and retired employees		1	—	1	—
Reassignment		4	—	—	2
Total R&D personnel at the end of the period		7	9	8	9
Average tenure (year)		4.63	4.97	5.95	2.99
Turnover rate (Note)		7.69%	10.00%	22.00%	—
Distribution of academic qualifications	PhD	—	—	—	—
	Master's Degree	9%	9%	8%	33.33%
	College	91%	91%	92%	67.67%
	Junior college	—	—	—	—
	Senior high school and lower	—	—	—	—

Note: Turnover rate= resigned employees/ (number of personnel at the beginning of the period + new employee of the period)

(3) Annual R&D expenditure and the latest successfully developed technologies or products for the recent years

A. Annual R&D expenditure input in the five recent years and the latest period

Unit: NT$ (thousand)

Year / Item	2018	2019	2020	Q1 2021	2021 (forecast)
R&D expenses	22,059	26,415	29,438	1,840	13,756
Net operating revenue	6,310,637	6,369,520	5,285,365	1,693,130	5,676,404
Percentage to the net operating revenue (%)	0.35%	0.41%	0.56%	0.11%	0.24%

Source: financial statements audited or reviewed by CPAs

(2) Successfully developed technologies or products

Item	R&D outcomes	Effect description
Reclaim technology of wasted oxidation catalysts	The metal is reclaimed from the cobalt-containing manganese ash slag, and then made into an oxidation catalyst or a cobalt compound.	1. Improved capabilities of reclaiming technology. 2. Reduce raw material costs. 3. Strengthen the competitive advantages.
PTA process metal recovery-1	The metal is recovered from the oxidation residue of the PTA process on the line, and then made into an oxidation catalyst or a cobalt compound.	More than 95% of cobalt and manganese metal may be recovered from PTA plant.
PTA process metal recovery-2	Metals are recovered from the wastewater from the PTA process on the line, and then made into oxidation catalysts or cobalt compounds.	More than 95% of cobalt and manganese metal may be recovered from PTA plant.
Improved powder production process	Various specifications of powder products may be produced.	1. Save raw material consumption and reduce production costs. 2. Expand market share with customized products.
Development of new products	Cathode materials for secondary lithium batteries	1. Product diversification 2. Market internationalization
Reclaim waste sulfuric acid	Reclaim sulfuric acid from the semiconductor industry to remove hydrogen peroxide	Charge processing fee from the customers Resales after recycling and processing
Waste ammonium sulfate recovery	Ammonium sulfate mother liquor provided by vendors to make ammonium sulfate	Charge processing fee from the customers Resales after recycling and processing
Technology of developing superfine ferrous oxalate	Using chemical precipitation method to produce ultrafine ferrous oxalate with a particle size of 0.8~1μm	The electrical properties of the finished product at the clients' end would be improved. Further the competitive advantages are strengthened.
Technology of developing high specific surface area barium carbonate	Using chemical precipitation method to make barium carbonate with a specific surface area of 15 m2/g	Improve the quality of the client's finished product. Further the competitive advantages are strengthened.
Nitrate development	Development of nitrate (cobalt/manganese/nickel/lithium) as a raw material for cathode materials	Develop new products based on customer needs and improve customer stickiness.
New production line process adjustment	Enhancing the quality and efficiency of the production lines	Reduce the disqualification and re-works of subsequent products, thereby strengthening the competitive advantages
Environmental pollution improvement	Reduce the production of heavy metals in wastewater by precipitation	It may avoid environmental pollution and reduce the related costs of environmental protection.

4. Long and Short Term Business Development Plans

(1) Short Term Business Development Plans

①Marketing strategies

A. Strive for long-term orders from customers with reasonable prices and stable quality, and increase market share.

B. In addition to the domestic market, actively explore the international market and strive for orders from foreign manufacturers.

C. Fully communicate with customers, understand their needs for products, provide a full range of solutions, and perfect after-sales service to maintain long-term cooperative relations and meet the diverse needs of customers.

②Production strategy

A. In order to implement the ISO quality policy, improve the quality concept and implement the quality system, the Company established a management system implementation team; since July 2019, the Company has successively passed ISO 14064-1 greenhouse gas inventory, ISO45001 and 14001 occupational safety and health and environmental management system, ISO50001 energy management system, and passed the IATF 16949 certification in October 2019. In November of the same year, CoreMax Group fully passed the ISO-9001 certification.

B. Actively increase capacity and make every effort to improve the production process, seeking to achieve rationalization, institutionalization and standardization of production, shortening the production cycle, increasing the production yield, and strengthening training to improve the quality of employees.

C. Reduce production costs and eliminate possible waste, including manpower inventory, resource sharing, simplification of operations, simplifying processes, and using the ERP system to obtain the best economic feed cost and inventory cost.

D. To meet the needs of customers, overseas production bases are established and the capacity is expanded, providing rapid production, simple transportation and timely delivery functions, meeting the maximum satisfaction of customers, thereby increasing market share and maintaining stable growth in performance.

③Financial Planning

A. Keep close and good relationships with each bank to strengthen the ability of capital deployment.

B. Seek low-interest loans, such as strategic low-interest loans, to reduce the Company’s capital cost.

C. Strengthen capital management and risk control capabilities to reduce the Company's operating risks.

(2) Long Term Business Development Plans

①Marketing strategies

A. Provide a full range of customer-oriented services, strive to improve customer satisfaction and meet customers' different product needs.

B. Cope with the development of new recycling technologies, provide customized professional services, cultivate partnerships, and strive for long-term orders to increase the company's profit.

C. Actively expand overseas markets to reduce the risk of market concentration.

D. Actively cultivate professional sales talents, enhance international marketing capabilities, and increase the Company's market share.

②Production strategies

A. Continuously improve the quality of products and services.

B. Seek strategic alliance partners, integrate upstream and downstream industries, strengthen the quality and capabilities of the supply chain in order to reduce costs, improve operational efficiency and competitive advantages.

C. Actively seek cooperation with major international manufacturers, develop emerging markets in a planned manner, and strive for orders from well-known international manufacturers to increase market share.

D. Monitor the future development trends of the chemical fiber industry and the lithium battery market, focusing on the research and development of upstream raw materials for related products, establishing technical independence, and solidify the image as the market leader in professional and innovative products and technologies.

③Financial planning

A. Push the Company's access into the capital market to increase the Company's funding channels and obtain diversified funding sources.

B. Be adaptive to the expansion of the operation scales and the establishment of overseas bases to enhance international fund-raising capabilities.

II. Production and Market Analysis

(I) Market Analysis

1. Geographic areas where the main products (services) of the company are provided (supplied)

Unit: NT$ (thousand)

<table>
<tr><td colspan="2" rowspan="2">Item</td><td colspan="2">2019</td><td colspan="2">2020</td></tr>
<tr><td>Amount</td><td>Ratio</td><td>Amount</td><td>Ratio</td></tr>
<tr><td colspan="2">Domestic sales</td><td>2,520,644</td><td>40%</td><td>2,346,151</td><td>44%</td></tr>
<tr><td rowspan="2">Foreign sales</td><td>Asia</td><td>3,423,002</td><td>54%</td><td>2,748,924</td><td>52%</td></tr>
<tr><td>Europe, and the Americas</td><td>425,874</td><td>6%</td><td>190,289</td><td>4%</td></tr>
<tr><td colspan="2">Sum of operating revenues</td><td>6,369,520</td><td>100%</td><td>5,285,365</td><td>100%</td></tr>
</table>

The major export market of the Company is Asia, and Japan has a higher proportion of sales.

2. Market share, demand and supply conditions for the market in the future, the market's growth potential

(1) Oxidation catalysts (chemical fiber PTA industry)

The Company has invested in the production and sales of oxidation catalyst products at the beginning of its establishment. The PTA oxidation catalyst products produced are not standardized products with a single specification. Each PTA manufacturer has different processes and technologies, with different requirements for oxidation catalyst formulations. Even though PTA oxidation catalyst accounts for less than 0.5% of the cost of PTA, the quality of oxidation catalyst products greatly affects the production speed and quality of PTA. Therefore, each PTA manufacturer's main considerations for the oxidation catalyst used are the applicability of its own process, the stability of the oxidation catalyst product quality and the follow-up technical service. Therefore, once a PTA manufacturer selects its oxidation catalyst supplier, it would replace it easily. Although the PTA oxidation catalyst industry is not a capital-intensive and labor-intensive industry, there is still a relative degree of technical threshold and market segmentation. Taiwan’s oxidation catalyst industry is an oligopolistic market. Currently, the domestic PTA oxidation catalyst products are mainly produced by two manufacturers, i.e. the Company and Mechema Chemicals. The Company's oxidation catalyst production lines located in Taiwan, Ningbo, Zhuhai, Zhangzhou in China, and Rayong in Thailand, providing and meeting the needs of customers for oxidation catalysts locally, with good technical services. The Company is also in the position of a domestic oligopoly manufacturer.

Production and sales volume of oxidation catalysts in 2018 and 2019

Unit: tons

Company	Production volume		Sales volume	
	2018	2019	2018	2019
CoreMax	11,827	13,703	11,817	13,154
Mechema Chemicals	22,284	18,681	18,179	18,908

Source: Annual report of shareholders' meeting

According to the 2018 and 2019 shareholders' meeting annual reports of the Company and Mechema Chemicals, the Company's oxidation catalyst production volume in 2018 and 2019 was 11,827 tons and 13,703 tons, respectively; and the sales volume was 11,817 tons and 13,154 tons, respectively. Mechema Chemicals' production volume of oxidation catalyst in 2018 and 2019 was 22,284 tons and 18,681 tons, respectively; and the sales volume was 18,179 tons and 18,908 tons, respectively. It is estimated that the Company's PTA oxidation catalyst products account for about 40% of the Taiwan market.

(2) Power battery materials

Production and sales volume of power battery materials for 2018 and 2019

Unit: tons

Company	Production volume		Sales volume	
	2018	2019	2018	2019
CoreMax	23,149	31,049	22,810	30,347
Mechema Chemicals (Note)	19,715	Note	4,075	4,571

Source: annual report of shareholders' meeting

Note: This data is from Mechema Toda Corporation, a joint venture with Toda Kogyo Corp. of Japan; and the Mechema Toda produces and manufactures on their own without disclosing production volume since 2019.

The battery materials produced by the Company are mainly nickel sulfate and cobalt sulfate, which are mainly provided to downstream customers as raw materials for NCM and NCA. According to the annual reports of the shareholders' meetings of the company and Majestic 2018 and 2019, the production volume of power battery materials of the Company in 2018 and 2019 was 23,149 tons and 31,049 tons, respectively, and the sales volume was 22,810 tons and 30,347 tons; Mechema Chemicals' 2018 production volume of power battery materials was 19,715 tons. No relevant information was disclosed in 2019. The sales volume was 4,075 tons and 4,571 tons respectively. The company's production volume and sales volume in 2019 increased by 34.13% and 33.04% respectively compared to 2018, mainly benefited from the demand for power battery materials. Because the Company's production and sales volume lead the industry, the Company also expanded the third nickel sulfate production line. It carried out a process de-bottleneck plan in 2019 to increase capacity, making the Company a leader in the production and sales of battery materials.

The penetration of lithium batteries through 3C products has driven a wave of demand and technology growth, but in the future, another wave of growth momentum for battery materials will shift from 3C products to the electric vehicle market, mainly the penetration of pure electric vehicles (BEV, Battery Electric Vehicle), plug-in hybrid electric vehicles (PHEV, Plug-in Hybrid Electric Vehicle), hybrid electric vehicles (HEV), and electric buses applications.

(3) Fertilizer

Currently, the main domestic compound fertilizer producers are four major manufacturers. Except for Taiwan Fertilizer Co., Ltd., which has a market share of 70%, the remaining 30% is mainly shared by Company’s subsidiaries, Heng I Chemical, Hong Heng Chemical Co., Ltd., Grainking Enterprise Co., Ltd., and other small manufacturers, as well as importers. Due to the large difference between the low and peak seasons in the fertilizer market in Taiwan, there is a shortage of fertilizers during peak seasons. Therefore, if sufficient stocks are prepared in the off-season and production is smooth in the peak season, the estimated volume can be reached.

The domestic fertilizer market has stable demand for use, and the production volume and sales volume are showing a growing trend. The Company has its own brand with stable quality and maintains a good reputation in the consumers’ market. It has a steady market share. In addition, as organic awareness has risen in recent years, it becomes popular to add organic matters to traditional compound fertilizers. The Company also has launched organic products to seize the market in time.

(4) Specialty chemical materials and others

①Cobalt Hydroxide

The main competitors are Umicore from Belgium, Freeport from Finland, Shepherd from the United States and Huayou from Mainland China.

②Sulfuric acid

The main domestic sulphuric acid manufacturers are Heng I, Beaming, Kuang Ming Enterprise, Chung Hwa Chemical, and Jiann Feng

Enterprise. Except that Jiann Feng Enterprise locates in Kaohsiung, the other four are in the north of Taiwan. The sulfuric acid eighth plant invested by the Company has been commissioned in December 2014 and started mass production in July 2015, with a daily output of 500 tons of sulfuric acid. Other than the replacement of the old facilities, the expansion and increase of production in recent years were conducted with the collaboration of the customer, to complement the customer’s electronic grade sulfuric acid plant expansion. Thus the shipment volume and turnover of semiconductor electronic acid are increased. .

③Oxalic acid

The global oxalic acid industry's market value in 2020 was approximately US$6.957 million. From 2018 to 2025, the demand for this product is predicted to increase by 4% due to growth in pharmaceuticals, chemical engineering, textile and leather. China is the largest producer and consumer of oxalic acid, which accounts for 85% of the production, followed by India and France China is improving the technology and quality of refined oxalic acid, and the manufacturing cost is low, which is competitive for the Company's export to the Japanese market.

3. Future market supply and demand, and growth

(1) Oxidation catalysts (chemical fiber PTA industry)

The global growth rate of capacity is increasing, mainly because China's capacity has begun to release greatly, making the global PTA market oversupply. In the second half of 2020, China's leading companies will have large new PTA facilities to start production, and the overcapacity will become more obvious. Under the circumstances, China’s overall industrial chain is expected to have a new round of consolidation. Leading companies have extended and expanded upstream of the industrial chain to increase bargaining power through vertical integration. By then, the small-scale companies with old facilities will be eliminated first. Still, as the pandemic in China has been contained, the operating rate of polyester has rebounded, and the demand for downstream purchases of materials has become active. Therefore, there is also a strong demand for PTA, which is expected to drive the demand for oxidation catalysts in the future.

(2) Power battery materials (lithium battery industry)

In the future, the growing demand for battery materials for lithium batteries will mainly be in pure electric vehicles, plug-in hybrid electric vehicles, hybrid vehicles and electric buses. According to the ITRI IEK’s report of power lithium battery application in the electric vehicle, the demand for power lithium battery for electric vehicles in 2030 will be 554GWh. Based on the initiative that major countries around the world will ban the sale of combustion vehicles in 2040, it is presumed that the demand for electric vehicle power lithium batteries will reach 1,056GWh in 2040, mainly because China's implementation of the subsidy policy for electric vehicle purchases stimulates and drives the momentum of China's electric vehicle market. Europe, the United States, and Japan have strict requirements for vehicle emission reduction, and the electric vehicle market is growing steadily. The future demand for BEV and PHEV will continue to rise, and the demand for lithium battery cathode materials is also growing.

Estimated global shipments of lithium batteries and expected shipments of various application areas

	2017	2018	2019F	2020F	2021F
Others	8384	10433	10146	11755	14006
Power tool	3817	4366	4805	5157	5223
BESS	5006	6949	9004	11055	14582
UPS/Station	1774	2223	2786	3044	3621
Other Vehicle	5322	6271	7144	7855	8841
E-Pedelec/Bike/Scooter	4888	5998	6076	6582	6889
E-bus/Truck	9004	11982	10932	10293	10288
EV	58883	90957	137422	174172	200057
Wearable	1304	1555	1842	2023	2218
Tablet	7650	6988	6255	5839	5911
NB	9114	9211	9298	9374	9422
Cellphone	20842	20988	21276	21843	22528
Total	135988	177921	226986	268992	303586

Sources: ITRI IEK (2017)

According to the Industry, Science and Technology International Strategy Center, ITRI survey, it is estimated that the global shipments of lithium batteries for automotive power in 2021 will account for about 65% of the shipments of lithium batteries. The future market growth is promising.

(3) Compound fertilizer (chemical fertilizer industry)

According to statistics from Taiwan Industry Economics Services, TIER, China has cancelled export taxation policies for 94 commodities, including chemical fertilizers since 2019, which has made China's fertilizer exports to the Asian market to be expanded and exerted competitive pressure on the fertilizer export. However, due to the impact of the COVID-19 pandemic in 2020 and the lockdown policy imposed by some countries for pandemic containment, logistics and transportation have been impeded, and the overall fertilizer export value has dropped. However, in 2020, China's fertilizer was delayed in the resumption of operation, logistics and transportation were interrupted, and fertilizer exported to Pakistan and Turkey have seen a significant decline. The partial order shift effect has led to a significant increase in potash and nitrogen fertilizer exports to Pakistan and Turkey. Because fertilizer is a necessity to improve the quality and efficiency of crop production, in the future, when the pandemic stabilizes and logistics and transportation resume, the export volume of fertilizer is expected to resume the growth.

(4) Specialty chemical materials (electronics, tires, textile printing and dyeing, ceramics and other industries)

①Cobalt Hydroxide

At present, only the company has the key technology for mass production and mass production lines. According to statistics published by ICON group Ltd, Taiwan’s exports in this industry account for 3.76% of the world, ranked 6th globally. Therefore, it is inferred that the Company's production and export ranking of this product is 6th globally. The main production countries of chemical materials are Belgium (Umicore), Finland (OMG), China (Huayou), the United Kingdom, and Taiwan (CoreMax), with a total global market share of approximately 84%. This industry is an oligopolistic market, and supply and demand are stable.

②Sulfuric acid

The Company's newly built sulfuric acid equipment was put into operation in July 2015, but the flood of imported acid affects Taiwan's sulfuric acid industry. The next important issue for Taiwan's sulfuric acid industry would be how to compete with imported acid.

③Oxalic acid

The Company is the only company in Taiwan that produces oxalic acid. It uses the developed superfine ferrous oxalate development technology to improve the quality of the customer's finished products while reducing the cost to meet the price needs of customers, thereby strengthening its competitive advantage and increasing market share.

(5) Recycling business

The company has applied for the recycling of waste sulfuric acid and waste ammonium sulfate mother liquor. The current partners are leading domestic semiconductor manufacturers.

4. Competitive niche

A. Infusion of orders from major international companies

With the vigorous development of the electric vehicle industry, the demand for various lithium battery materials is increasing. The share of power battery materials in the Company's product revenue also increase gradually. The Company's power battery materials, such as cobalt sulfate and nickel sulfate have stable quality and thus have been recognized by leading international companies for procurement. Meanwhile, the Company has established a third production line to respond to the sharp increase in demand. Therefore, driven by the demand of the electric vehicle industry, the Company actively expands and develops production and provides a promising profitable factor for the future market.

B. Unique mass capacity of oxidation catalyst and cobalt hydroxide

The Company is a domestic oligopolistic manufacturer both in terms of oxidation catalyst and specialty chemical materials such as cobalt hydroxide and cobalt oxide. The end applications of both are traditional necessities of daily livelihood. For both oxidation catalyst and cobalt hydroxide, professional technology and complete after-sales service are provided to the customers, with assistance to customers to solve problems in the manufacturing process, as provisions of a full range of services.

The Company also built oxidation catalyst production lines in Ningbo, Zhejiang and Zhangzhou, Fujian in China and Rayong in Thailand, to provide local customers with demand and technical support, and to increase revenue growth strength through domestic and foreign product sales positioning.

C. End demand of leading companies

The electronic grade sulfuric acid developed by the company's subsidiary, Heng I Chemical, is featured with high process safety, high product purity and low impurity ion content and is better suitable for semiconductor circuit production and cleaning. The Company's subsidiary, Heng I Chemical produces and sells electronic grade sulfuric acid to meet the needs of Japanese customers. Its end customers include the leading semiconductor manufacturers in Taiwan. In response to the demand for capacity expansion in the semiconductor industry, electronic grade sulfuric acid demand is increasing. The Company's subsidiary, Heng I Chemical, actively engages in accommodating plant expansion and production increase plans and continues to improve production and quality, to enhance the business's profitability.

D. Professional production technology and stable product quality

Since its establishment in June 1992, the Company has been engaged in producing and selling chemical products such as oxidation catalysts. In addition to many years of process experience, it has continued to implement the refinement of production technology and the improvement of production equipment. It introduced the ISO9001 quality certification system in October 1996, and the ISO14001 environmental certification system in August 2009, to focus on improving product quality. The Company's technical team is very experienced for many years and has rich professional knowledge in the development of industrial product trends and production technology.

F. Independent R&D capabilities

In light of the Company's expanding operating scale year by year, other than the existing products, the Company is currently also expanding the direction of R&D towards electronic materials, such as cathode materials for lithium batteries. The Company's R&D goals are not only to improve the existing process and increase the efficiency of recycling and regeneration of waste catalysts, but also plan to develop new products based on the current accumulated technologies and experience, expand product production lines and services, and enhance the content and quality of the business.

G. Senior talents with abundant professionalism

The senior executives of the Company are all senior employees or senior practitioners in the industry. They have rich experience in the company's industry, production technology and marketing strategy and are familiar with industry trends. The Company's various development decisions may be made quickly and appropriately.

5. The favorable and unfavorable factors and countermeasures

(1) Favorable factors

(A) China's petrochemical industry is effectively suppressed, helping to balance supply and demand

The oxidation catalyst products produced by the Company are important catalyst raw materials for the production of PTA, and the oxidation catalyst has high added value, without other alternatives currently. PTA is mainly used for polyester, including polyester fiber, polyester pellets and polyester film. Among the polyesters, the major usage is to produce polyester fiber, providing finished clothing materials (such as Tetoron, Tedelon, Tairilin, Eastlon, Jinzhulon, and Hualon Silk), non-woven fabrics, tire cords, and automotive seat belts; secondly, it is used to produce polyester pellets, which may be used to make plastic containers, such as PET bottles of beverages; polyester film used for videotapes, audio tapes, medical X-ray film and packaging materials, among other things. The usage of PET is very wide and has an important influence on human life-related products; its demand has a considerable degree of stability.

(B) The concept of energy substitution and the rise of electric vehicles

In recent years, the concept of green and alternative energy has become more and more popular. Europe and China are also actively developing the electric vehicle industry to improve energy problems and are committed to sustainable alternative energy. Benefiting from the development and growth of the electric vehicle industry, the demand for battery materials for electric vehicles is increasing. The Company's main products, such as nickel sulfate and cobalt sulfate, are used in the production of cathode materials for lithium batteries. In order to meet this boom of electric vehicles, various battery material manufacturers are striving to break through the limitations of battery materials, such as improving the safety of ternary battery materials, increasing the electrical capacity of binary battery materials, among other things, and the future R&D of battery materials and the breakthrough will be more mature.

(C) Adoption trend of ternary battery materials

Compared with LFP, LCO, LNO and LMO battery materials, ternary battery materials (NCM and NCA) have the characteristics of nickel, cobalt, manganese or nickel, cobalt, aluminum and have the advantage of high energy density. Other than the leading U.S. manufacturer Tesla's use of NCM and NCA, Chinese electric vehicle manufacturers such as Beijing Automotive, Geely Automobile, and Zotye Automobile, as well as some European car makers have selected ternary battery materials. This demonstrates that ternary battery materials have opened up acceptance in the electric vehicle market. Therefore, the Company's nickel sulfate and cobalt sulfate may leverage the growth of ternary battery materials and the trend of manufacturers' selection to reflect in the Company's revenue and profit growth.

(D) Fertilizer brand value deeply rooted in farmers' mind

The Company's subsidiary, Heng I Chemical, has a history of more than 40 years in the fertilizer business. Its own brand "Gufeng" products include straight fertilizers, chemical compound fertilizers and organic compound fertilizers, which may be applied to crops such as rice, sweet potatoes, potatoes, teas, fruit trees, tomatoes, and fruits, which almost cover all domestic farming, are deeply favored by farmers, and occupy a position in the domestic fertilizer market. Heng I Chemical, a subsidiary of the Company, is also the OEM of Sinon Corp. for compound fertilizers "black granular fertilizer" with various mixing proportions. It demonstrates that the quality of the compound fertilizer produced by Heng I Chemical, a subsidiary of the company, is stable and good. With the long-time reputation of Sinon, it may also make farmers recognize the fertilizer quality of Heng I Chemical, a subsidiary of the company.

(E) Cancellation of fertilizer subsidies is favorable for price return to a market mechanism

According to the statistics of the Council of Agriculture, Executive Yuan, the annual application of chemical fertilizers in Taiwan accounts for about 85% of the total fertilizers. It shows that farmers mainly use chemical fertilizers. The government subsidy policy for chemical fertilizers mainly aims to stabilize the market price of chemical fertilizers, but also results in low prices of chemical fertilizers. As the farmers use it frequently, the soils they cultivate are damaged. Therefore, the Council of Agriculture, Executive Yuan has cancelled subsidies for chemical compound fertilizers since March 2017; at the same time, the subsidies for organic compound fertilizers increased. The purpose is to use chemical fertilizers when farmers apply fertilizers for quick provision of nutrients to crops, which is a common application by domestic farmers during farming. Still, if farmers use organic fertilizers to supplement the organic matter in the soil during farming, the utilization rate of fertilizers will be improved.

This will enable the price of chemical fertilizers to fully reflect the fluctuations in the cost of raw materials, and the prices return to the market mechanisms, thereby providing the Company's subsidiary, Heng I Chemical Chemical, with a gross profit of chemical fertilizers; on the other hand, it will enable farmers to use chemical fertilizers with organic compound fertilizers more efficiently. This will also improve the chemical and organic fertilizer business of the Company's subsidiary, Heng I Chemical Chemical, and thusbring a win-win benefit.

(F) The quality of electronic grade sulfuric acid is favored by major manufacturers

The Company's subsidiary, Heng I Chemical, develops electronic grade sulfuric acid with high purity and relatively pure quality. It is mainly supplied to major Japanese manufacturers, and the main sales targets are domestic major semiconductor manufacturers. Because high-end semiconductor manufacturing processes require higher-purity sulfuric acid to clean impurities, the electronic grade sulfuric acid produced by the Company's subsidiary, Heng I Chemical, can meet purity requirements and quality. The product quality is also favored by major manufacturers. With the fierce competition and evolution of semiconductor manufacturing processes, the demand for high-purity sulfuric acid has increased significantly. The products of the Company's subsidiary, Heng I Chemical, will also meet the needs of major manufacturers.

(2) Unfavorable factors and countermeasures

(A) Cobalt and nickel metals are totally dependent on imports

The Company highly relies on imported nickel and cobalt metals from abroad, so fluctuations in the market price of raw materials would easily affect the Company's product gross profit.

Countermeasures:

a. Sign a supply contract and always monitor the market conditions

The Company's raw metal procurement is done by signing supply contracts to ensure that the supply of raw materials is not insufficient. If there is a quantity that misses the demand, it will be purchased in the spot market. The Company also closely monitors the market conditions. Suppose the international market prices of nickel and cobalt metals are low. In that case, it will consider building the inventory and safe stock, by flexibly adjusting the quantity and time of purchase to stock inventory in order to avoid the risks of fluctuations in raw material prices.

b. Diversify purchases from different suppliers

The Company regularly evaluates the quality of raw materials, quotation, and cooperation of suppliers, and selects high-quality suppliers for medium- and long-term cooperation. The Company also diversifies purchases to multiple suppliers to avoid excessive concentrated purchases or out-of-stocks risk.

(B) The number of domestic PTA manufacturers is limited, and the sales targets are relatively concentrated

The oxidation catalyst is an important catalyst for the PTA process. The main sales target is PTA manufacturers. Because the PTA industry is capital- and technology-intensive, domestic PTA manufacturers are limited and sales are relatively concentrated.

<u>Countermeasures:</u>

a. Actively expand the international sales market by setting up overseas subsidiaries

The Company has a considerable market share in the domestic market, and overseas markets are also positioned in the Ningbo of Zhejiang Province and Zhangzhou of Fujian Province in China, and the Rayong area of Thailand. The Company has set up oxidation catalyst production lines in these local areas to supply local PTA manufacturers. The Company is committed to expanding overseas markets while also reducing the risk of concentration of sales.

b. Expand business diversification and step out of the chemical fiber product field

In addition to the oxidation catalyst business, the Company is also striving to expand its core business, such as merging a subsidiary operating compound fertilizers, developing an electronic grade sulfuric acid business, and researching and developing products in the field of power battery materials. By actively investing costs, international manufacturers have also favored some products while being sold to overseas markets continuously. These products have successfully expanded the diversification of their business and have also stepped out of the field of chemical fiber products to increase the Company's operating advantages.

(C) Working capital needs in response to the growth of business volume

Other than the original oxidation catalyst products, the Company actively explores overseas markets; the main products such as power battery materials nickel sulfate and cobalt sulfate, after passing the certification of major international battery manufacturers, have met the increasing demand for lithium battery cathode materials in the future. As the business will continue to grow, the needs for working capital application is more demanding.

Countermeasures:

In addition to depending on its own earnings and bank borrowings, the Company’s source of working capital has also come from the funds with lower costs by accessing the capital market through the share listing so that the fund demands generated from the business growth are met.

(D) High environmental awareness and strict standards

Amid the high awareness of global environmental protection, the raw materials used, and products produced by Company, which operates in the chemical engineering industry, are all chemicals, and the Company assumes the obligation of environmental protection Moreover, for the products sold to European customers, the Company has also completed the relevant REACH regulations registration.

Countermeasures:

Since its establishment, the Company has valued the treatment of environmental issues significantly. In addition to successively investing capital to increase and improve pollution prevention equipment, and well execute the recovery and treatment of waste gas and wastewater, the Company has passed ISO14000 certification to meet higher environmental protection standards.

(II) Major Products, their main uses and production processes

1. Main product applications

Product type	Main product	Major use
Oxidation catalysts	Crystal form (cobalt acetate, manganese acetate)	Catalyst for PTA oxidation reaction Brightener for PET polyester Catalyst for PTA oxidation reaction
	Liquid form (cobalt acetate, manganese acetate)	
Power battery materials	Crystal form (cobalt sulfate, nickel sulfate) Powder type (cobalt compound)	Cathode materials for secondary lithium batteries
Chemical fertilizer	Fertilizer	Botanic nutrition

Product type		Main product	Major use
Others	Advanced material	Powder type (cobalt compound)	Paint drier, tire adhesive
	Chemical raw materials	Sulfuric acid	Synthetic chemicals
	Oxalic acid	Oxalic acid, potassium dioxalate, potassium tetraoxalate	For cleaning, marble material grinding
	Oxide	Cerium oxide, lanthanum oxide, among other things	Fluorescent (powder), LED
	Electronic chemicals	Cerium Ammonium Nitrate	Etching
	Others	Powder type (cobalt compound)	Ceramic glazes and pigments
		Raw material trading (cobalt, manganese metal, etc.)	Depending on the customers' usages.

2. Manufacturing process

(1) Crystal form products

Raw material → Reaction → Crystallization → Drying → Packaging → Finished product

(2) Flow chart of production and production of liquid products

Raw material → Reaction → Intermediate product → Formulation → Storage → Finished product

(3) Production flow chart of powder type products

Raw materials → Reaction → Precipitation → Filtration → Drying → Calcining → Grinding → Packaging → Finished product

(4) Fertilizer

Raw material crushing → Mixing → Granulation → Drying → Sieving → Cooling → Coating → Finished products

(5) Sulfuric acid

Sulfur melting heating→SO2→ Conversion→SO3→Adding water→H2SO4

(6) Oxalic acid

Raw material → Melting → Purification → Filtration → Cooling crystallization → Solid-liquid separation → Wet-based oxalic acid → Drying → Finished product

(III) Supply of main raw materials

The main raw materials of the Company are cobalt metal and nickel metal. The main raw materials of fertilizer and sulfuric acid are ammonium sulfate and urea. The main raw materials of oxalic acid and rare earth are oxalic acid and Indonesian tin ingot. The Company maintains a good cooperative relationship with individual suppliers, and signs supply contracts every year to ensure a secure supply. If the contract volume is insufficient, it can be obtained at the spot price in the spot market.

Major materials	Domestic suppliers	Foreign suppliers	Supplying condition
Cobalt (Co)	None	VAH, VAU, and VAZ	Sufficient supply
Manganese (Mn)	None	VAX	Sufficient supply
Nickel (Ni)	None	VCB, VCC, VO, VCD	Sufficient supply
Bromic acid (Hbr)	None	VE、VU、VBQ	Sufficient supply
Glacial Acetic Acid (Hac)	VH	None	Sufficient supply
Ammonium Sulfate	VBS	None	Sufficient supply
Urea	None	VBU、VBZ	Sufficient supply
Potassium Chloride	None	VBV、VBZ	Sufficient supply
Sulfur	VBA、VAX	None	Sufficient supply
Oxalic acid	None	VBO、VBG、VBH、VCA	Sufficient supply
Indonesia tin ingors	VBJ	None.	Sufficient supply

(IV) Suppliers and clients accounting for 10 percent or more of the company's total procurement (sales) amount in either of the 2 most recent fiscal years, the amounts bought from (sold to) each, the percentage of total procurement (sales) accounted for by each, and an explanation of the reason for increases or decreases in the above figures

1. Major Suppliers for the most recent two years

Unit: NT$ (thousand)

Item	2019				2020				2021 up to Q1			
	Name	Amount	As a percentage of net purchases for the year (%)	Relationship with the issuer	Name	Amount	As a percentage of net purchases for the year (%)	Relationship with the issuer	Name	Amount	As a percentage to net purchases as of the previous quarter of the year (%)	Relationship with the issuer
1	VCB	1,188,242	26.12	None.	VCD	694,636	19.63	None.	VCD	470,300	27.27	None
2	VCD	836,486	18.38	None.	VCB	573,587	16.21	None.	VO	285,685	16.56	None
3	VAU	823,466	18.10	None.	VAU	409,402	11.57	None.	VCE	229,842	13.32	None
4	Others	2,101,690	37.40	None.	Others	1,860,944	52.59	None.	Others	739,134	42.85	None
	Purchase Net amount	4,549,864	100.00		Purchase Net amount	3,538,569	100.00		Purchase Net amount	1,724,961	100.00	

Reason for change:

(1)In 2020, the world fell into the threat of the COVID-19 pandemic. The CoreMax Group's performance was still stable. Still, due to the impact of metal prices in the international market, the turnover fell, resulting in a decrease in the total net purchases comparing to 2019.

(2)The Company usually maintains about five metal suppliers and determines the purchase counterpart based on the purchase unit price provided by each supplier, which causes changes in ranking and proportion.

2. Major customers for the most recent two years

Unit: NT$ (thousand)

Item	2019				2020				2021 up to Q1			
	Name	Amount	As a percentage of net sales for the year (%)	Relationship with the issuer	Name	Amount	As a percentage of net sales for the year (%)	Relationship with the issuer	Name	Amount	As a percentage to net sales as of the previous quarter of the year (%)	Relationship with the issuer
1	CP	1,895,487	29.76	None.	CP	1,598,059	30.23	None.	CP	716,727	42.33	None.
2	CQ	982,867	15.43	None.	CQ	599,167	11.34	None.	CQ	130,966	7.74	None.
3	Others	3,491,166	54.81	None.	Others	3,088,139	58.43	None.	Others	845,437	49.93	None.
	Sales Net amount	6,369,520	100.00		Sales Net amount	5,285,365	100.00		Net sales	1,693,130	100.00	

Reason for change:

(1) The decrease in total net sales in 2020 comparing to that in 2019 was mainly due to the

decrease in demand for power battery materials.

(2) The increase or decrease of individual customers of the Company mainly depends on the needs of customers.

(V) Production in the most recent two years

Unit: ton; NT$thousand

Year / Production volume and value / Sales volume and value	2019			2020		
	Capacity	Production volume	Production value	Capacity	Production volume	Production value
Oxidation catalysts	28,000	13,703	954,551	28,000	12,318	749,268
Power battery materials	32,400	31,049	3,103,214	32,400	23,227	2,444,698
Chemical fertilizer	102,000	74,457	680,717	102,000	82,804	650,966
Others	(Note 1)	(Note 1)	782,501	(Note 1)	(Note 1)	804,782
Total	-	-	5,520,983			4,649,714

Note 1: The types of other products are different and the measurement units are inconsistent, so the production volume is not calculated.

Reason for the increase or decrease: It was due to the decrease in the output and demand for power electronic materials.

(VI) Sales in the most recent two years

Unit: ton; NT$thousand

Year / Sales volume and value / Main product	2019				2020			
	Domestic sales		Export sales		Domestic sales		Export sales	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Oxidation catalysts	12,617	872,991	537	130,704	11,576	728,946	1,575	173,640
Power battery materials	863	103,867	29484	3,199,002	1,102	132,496	24,042	2,454,794
Chemical fertilizer	74,338	683,665	0	0	85,971	775,903	0	0
Others	(Note 1)	860,121	(Note 1)	519,170	(Note 1)	708,806	(Note 1)	310,780
Total		2,520,644		3,848,876		2,346,151		2,939,214

Note 1: The types of other products are different and the measurement units are inconsistent, so the sales volume is not calculated.

Reason for the increase or decrease: It was due to the decrease in the output and demand for power electronic materials.

III. Employees Information for the Past Two Years Until the Publication Date of the Annual Report

Year		2019 (Consolidated)	2020 (Consolidated)	2021 as of March 31 (Consolidated)
Number of employees	Direct employees	269	251	251
	Indirect employees	155	162	168
	Total	424	413	419
Average age		38.45	39.24	39.54
Average years of service		5.89	6.72	6.60
Education Distribution Ratio	PhD	0	0	0
	Master's Degree	4%	3.87%	5.73%
	Bachelor's Degree	56%	61.5%	61.1%
	High School	33%	28.09%	27.44%
	Below High School	7%	6.54%	5.73

IV. Expenditure on Environmental Protection

(I) For the most recent year until the publication date of the annual report, the total losses (including damages) and fines incurred by the Company due to environmental pollution:

Date of fine/No. of fine	Laws violated	Status of Fine	Description of violation	Countermeasures:	Possible Expenditure
February 7, 2020 No. 20-109-020004	Air Pollution Control Act	Fine NT$100 thousand	On November 20, 2019, the Central District Environmental Inspection Team of the Environmental Inspectorate of the Environmental Protection Administration, Executive Yuan found out that in the other compound fertilizer processes (M10), the pressure difference value shown on the bag dust collector AA04 pressure drop meter of the air pollution prevention facility was water column height of 140mm, which did not match the operating parameters (10-80mm water column height) of the fixed pollution source operating permit (Miao-Fu-Huan-Cao-Zheng-Zhi No. K0863-02), and thus violated Article 24, Paragraph 2 of the Air Pollution Control Act.	The Company has furnished the explanation of correction and paid the fine pursuant to laws.	The Company has paid the fine with no additional expenditure

February 14, 2020 No. 40-109-020006	Waste Disposal Act and Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste	Fine NT$72 thousand	On November 20, 2019, theCentral District Environmental Inspection Team of the Environmental Inspectorate of the Environmental Protection Administration, Executive Yuan, found that (1) waste acid (pH less than 2.0) had no special storage place and no warning signs with white background, red letters, and black frames. Nor the indication of storage date, number, and composition. (2) The waste filter bags were scattered outside the plant openly, and the storage location was not clearly marked with the name of the waste in Chinese. There was no equipment and measures to prevent surface water and rainwater from entering and permeating. (3) The monthly filling of the waste filter bag D-0899 output, storage and removal status were found not fully truthfully, which violated Articles 6 and 10 of the Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste, Articles 7 and 11 of the Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste, and Article 31, Paragraph 1, Subparagraph 2, and Article 36, Item 1 of the Waste Disposal Act.	The Company has corrected on site, and paid the fine pursuant to laws.	The Company has paid the fine with no additional expenditure
May 21, 2020 No. 30-109-050002	Water Pollution Control Act	Fine NT$105 thousand	On November 20, 108, when the Central District Environmental Inspection Team of the Environmental Inspectorate of the Environmental Protection Administration, Executive Yuan, found out that there was an underground flood detention pond next to the T01-6 sedimentation tank and a sump tank to collect soft water at the waste acid reuse site. Also, it was found that during the recycling process of ammonium sulfate waste liquid, the condensed wastewater with ammonia-containing alkaline generated from the crystallization tank was reclaimed to process cooling water tower for use. Both were different from the contents of the waste (sewage) water discharging to groundwater permit, and thus violated Article 14, paragraph 1 of the Water Pollution Control Act.	The Company has completed the correction and paid the fine pursuant to laws.	The Company has paid the fine with no additional expenditure

(II) Countermeasures (including improvement measures) and possible expenditure due to pollution (including estimation of possible losses, fines, and damages due to inaction):

The Company's Hsinchu Plant has established relevant water treatment procedures and application for operating discharge permits pursuant to the Water Pollution Control Act. The wastewater is uniformly treated through the sewage sewer system of industrial zone, before discharging to the Jiadong Stream. The wastewater produced meets the water discharging standards, without major impact on the local environment. The Company also actively reduces the use of raw materials and other resources from the beginning to reduce the output of waste and reduce the impact on the environment. For the waste produced in the process, the Company has retained the cleaning and disposal institutions approved by the Environmental Protection Administration for adequate cleaning. In terms of environmental protection laws and regulations, we effectively manage the risks of environmental protection laws and regulations by managing energy, emissions, pollution prevention and continuous improvement in all aspects to comply with laws and regulations and reduce negative environmental impact.

In addition to coping with the international environmental protection trend, when the Toufen Plant manufactures products, it actively engages in reducing environmental pollution and saving resource consumption, promoting management measures such as reduction and recycling of wastewater, waste gas, waste, and prohibiting illegal cleaning and disposal institutions. To avoid secondary pollution to the environment, the cleaning and disposal institutions approved by the Environmental Protection Administration are retained to properly clean up and handle, to improve environmental sustainability and quality.

V. Labor Relations

(I) Availability and execution of employee welfare, education, training and retirement policies. Elaboration of the agreements between employers and employees, and protection of employee rights.:

1. Employee benefit measures
   (1) Cultural and recreational activities
   (2) Trip
   (3) Emergency reliefs
   (4) Gift vouchers for the three major festivals
   (5) Gift vouchers for birthday
   (6) Application for welfare subsidy
   (7) Employee dividends, share subscription.
2. Continuing education and training

To improve the working attitude, knowledge and skills of all employees, cultivate professional talents, for coping with the future development of the Company, the trainings are planned based on the positions and functions of employees, including orientations, professional technologies and skills, management function, general knowledge, and languages, while offering on-job continuing education resources to employees and encouraging external courses, for building a working environment where continuing learning is available to employees.

(1) Orientation for new employees

(2) Occupational safety training

(3) Professional course training: chemical analysis training and fork-lift truck training.

The following table shows the implementation of employee training and continuing education courses in 2020:

Unit: NT$ (thousand)

Item	Number of sessions	Total attendees	Total hours	Total expenses
1. Orientation for new employees	21	43	329	0
2. Professional function training	238	1,524	4,906	146,480
3. Skill Training for supervisors	10	111	637	94,890
4. General training	12	145	290	45,840
Total	281	1,823	6,162	287,210

3. Retirement system and its implementation status:

The Company formulates employee retirement procedures pursuant to the Labor Standards Act and forms the Labor Retirement Reserve Supervision Committee. Each month, 2% of the basic salary is contributed as a retirement reserve. At the same time, the reserve is deposited in the special account in the Central Trust Bureau under the name of the committee. Since July 1, 2005, by adapting to the implementation of the new system of labor retirement, the Company has consulted the employees' willingness to adopt the new system or the old system. For those who adopt the new system of labor retirement, 6% of the total salary will be contributed to the employee's personal pension-specific account monthly to protect their lives after retirement.

4. Agreement between employees and employer, and protective measures of various employees' interests:

The Company values the opinions of employees and regularly holds employee-employer meetings, invites employees from all over the Company to participate and encourages them to provide suggestions for understanding employees' opinions on management and welfare systems, as a reference for improvement, so the relationship between employees and employer has been harmonious so far. There is no litigation or any employee-employer incident to be mediated.

5. Protective measures for working environment and personal safety of employees:

The Company has been committed to environmental protection, energy-saving and employee care for a long time. It seeks to fulfill its social responsibilities and move towards sustainable operation while growing the Company. In addition to complying with relevant domestic laws and regulations, the specific measures are shown in the following table:

Item	Content
Maintenance and inspection of various equipment	1. In accordance with the regulations of the building public security inspection certification and reporting, the annual inspection is conducted. 2. In accordance with the provisions of the Fire Services Act, fire protection inspections are commissioned annually. 3. In accordance with the provisions of the Fire Services Act, the fire extinguishing equipment shall be self inspected monthly. 4. In accordance with the Occupation Safety and Health Act, high and low voltage equipment inspections are commissioned every year. 5. In accordance with the Occupation Safety and Health Act, the lift's monthly maintenance and inspections are commissioned. 6. The monthly inspection and maintenance of electrical equipment is commissioned.
Disaster prevention measures and response	1. Pursuant to the Occupation Safety and Health Act, the safety and health management program is established to prevent occupational disasters from taking place. 2. Conduct four-hour self-defense firefighting group training every six months pursuant to the Fire Services Act. 3. Pursuant to the Occupation Safety and Health Act and the Fire Services Act, the onsite safety and health personnel, various operational supervisors, operators, firefighting managerial personnel, security supervisors are sent to external training. 4. By adapting to ISO 14000, the chemical emergency contingency program is conducted every year. 5. Set up an emergency response team to reduce the impact of personnel and property in an emergency.
Physiological health	1. Pursuant to the Occupation Safety and Health Act, new employees have to conduct physical examinations, and incumbents have regular health examinations every year or every two years. 2. Pursuant to the Drinking Water Management Act, the drinking water is inspected quarterly.

Item	Content
	3. Pursuant to the Occupation Safety and Health Act, the work environment shall be measured for the operational environment every six months.
Informing contractor's operational hazardous factors	Pursuant to the Occupation Safety and Health Act, the contractor shall be controlled for the hazardous operations, and informed of the hazards.
Continuous monitoring and auditing	For the environmental safety operation in the plant area, other than the implementation of various environmental inspections and personnel working environment measurements pursuant to laws, a complete audit procedure has been established, as well as daily inspections, high-risk operation inspections, and supervisor patrols, to implement the continuous improvement and enhance environmental safety performance.

(II) For the most recent year until the publication date of the annual report, actual or estimated losses arising as a result of labor disputes and any countermeasures taken:

Since the establishment, the Company has established a good communication channel between employers and employees, to jointly manage the relationship with each other sincerely. For measures such as employee welfare, employee relations, working conditions and improving work efficiency, the Company has held regular quarterly employee-employer meetings to establish a harmonious working environment. And as of the publication date of the annual report, there have been no other losses due to labor disputes.

VI. Important Contracts

Nature of agreement	Counterparty	Commencement date of contract	Major Contents	Covenants
Long-term borrowings	Hwa Nan Bank	March 22, 2019 to June 18, 2024	Credit loans	None.
Mid-term borrowings	O-Bank	April 8, 2019 to April 7, 2026	Credit loans	Only applicable for "Welcome Taiwanese Companies Back to Invest in Taiwan Programs"
Mid-term borrowings	Mega Bank	May 7, 2019 to June 15, 2026	Credit loans and loans of machinery equipment	Only applicable for "Welcome Taiwanese Companies Back to Invest in Taiwan Programs"

Six. Financial Information

I. Most Recent Five Years Condensed Balance Sheet and Comprehensive Income Statement and CPAs' Audit Opinions

(I) Condensed Balance Sheet and Comprehensive Income Statemen- Based on IFRS

1. Condensed Consolidate Balance Sheet of the Company and subsidiaries

Unit: NT$ (thousand)

Item \ Year		2016	2017	2018	2019	2020	As of March 31, 2021
Current assets		2,061,816	2,646,402	3,513,801	2,936,335	2,980,654	4,070,286
Property, plant and equipment		2,812,080	3,021,606	3,585,346	3,842,821	3,977,135	3,957,075
Intangible assets		-	-	-	-	-	-
Other assets		272,390	125,832	184,458	189,700	259,760	306,250
Total assets		5,146,286	5,793,840	7,283,605	6,968,856	7,217,549	8,333,611
Current Liability	Prior to distribution	1,273,825	1,569,252	2,213,760	1,891,288	2,105,457	2,564,851
	After distribution	1,478,284	1,830,317	2,511,454	2,002,923	(Note 2)	-
Non-current liabilities		1,429,873	932,656	911,540	1,024,629	1,141,663	1,159,173
Liability Total amount	Prior to distribution	2,703,698	2,501,908	3,125,300	2,915,917	3,247,120	3,724,024
	After distribution	2,908,157	2,762,973	3,422,994	3,027,552	(Note 2)	-
Equity attributable to owners of the parent company		2,135,318	2,862,944	3,504,083	3,321,360	3,253,193	3,864,330
Share capital		757,254	864,737	929,417	930,293	930,293	1,030,293
Capital surplus		732,990	1,138,226	1,581,736	1,599,457	1,603,253	2,014,054
Retained Earnings	Prior to distribution	674,748	879,928	1,011,905	825,786	868,001	964,128
	After distribution	470,289	618,863	714,211	714,151	(Note 2)	-
Other equity interests		(7,240)	(1,192)	(4,909)	(20,128)	(18,558)	(14,349)
Treasury stock		(22,434)	(18,755)	(14,066)	(14,048)	(129,796)	(129,796)
Non-controlling interest		307,270	428,988	654,222	731,579	717,236	745,257
Total amount	Prior to distribution	2,442,588	3,291,932	4,158,305	4,052,939	3,970,429	4,609,587
	After distribution	2,238,129	3,030,867	3,860,611	3,941,304	(Note 2)	-

Note 1: The financial information above has been audited or reviewed by CPAs.
Note 2: 2020 earning distribution has not been resolved by the shareholders' meeting

2. Condensed Consolidate Comprehensive Income Statement of the Company and subsidiaries

Unit: NT$ (thousand)

Year / Item	2016	2017	2018	2019	2020	As of March 31, 2021
Operating revenue	3,993,681	4,980,823	6,310,637	6,369,520	5,285,365	1,693,130
Operating margin	346,467	749,966	780,810	489,940	475,469	214,423
Net operating income	133,009	531,739	555,640	240,618	216,302	114,152
Non-operating income and expenses	136,772	(2,641)	(17,717)	(12,575)	(9,868)	11,340
Net profit before tax	269,781	529,098	537,923	228,043	206,434	125,492
Net income from continuing operations	234,902	441,251	429,430	153,067	165,645	95,392
Net loss from discounting operations	-	-	-	-	-	-
Net income	234,902	441,251	429,430	153,067	165,645	95,392
Other comprehensive income (Profit after tax)	(29,206)	5,454	(3,667)	(15,646)	(921)	6,361
Total comprehensive income of the current period	205,696	446,705	425,763	137,421	164,724	101,753
Net income attributes to shareholders of the parent	216,661	411,530	393,022	128,016	155,164	96,127
Net profit attributable to non-controlling interest	18,241	29,721	36,408	25,051	10,481	(735)
Total comprehensive income attributable to owners of the parent	188,492	415,687	388,176	112,997	155,420	100,336
Total comprehensive income attributable to owners of the non-controlling interest	17,204	31,018	37,587	24,424	9,304	1,417
Earnings per share (EPS)	3.01	5.40	4.63	1.4	1.73	1

Note 1: The financial information above has been audited or reviewed by CPAs.

3. Condensed Balance Sheet of the Company

Unit: NT$ (thousand)

Item \ Year		2016	2017	2018	2019	2020
Current assets		1,046,739	1,617,782	2,394,900	1,921,522	1,966,946
Investments accounted for using the equity method		2,158,074	2,156,860	2,244,573	2,382,463	2,424,592
Property, plant and equipment		315,215	536,058	514,667	537,189	456,598
Intangible assets		-	-	-	-	-
Other assets		126,905	15,016	16,198	66,736	112,855
Total assets		3,646,933	4,325,716	5,170,338	4,907,910	4,960,991
Current liabilities	Prior to distribution	719,720	1,144,642	1,612,679	1,139,814	1,183,249
	After distribution	924,179	1,405,707	1,910,373	1,251,449	(Note 2)
Non-current liabilities		791,895	318,130	53,576	446,736	524,549
Total liabilities	Prior to distribution	1,511,615	1,462,772	1,586,550	1,586,550	1,707,798
	After distribution	1,716,074	1,723,837	1,698,185	1,698,185	(Note 2)
Equity attributable to owners of the parent		2,135,318	2,862,944	3,504,083	3,321,360	3,253,193
Share capital		757,254	864,737	929,417	930,293	930,293
Capital surplus		732,990	1,138,226	1,581,736	1,599,457	1,603,253
Retained Earnings	Prior to distribution	674,748	879,928	1,011,905	825,786	868,001
	After distribution	470,289	618,863	714,211	714,151	(Note 2)
Other equity interests		(7,240)	(1,192)	(4,909)	(20,128)	(18,558)
Treasury stock		(22,434)	(18,755)	(14,066)	(14,048)	(129,796)
Non-controlling interest		-	-	-	-	-
Total Total amount	Prior to distribution	2,135,318	2,862,944	3,504,083	3,321,360	3,253,193
	After distribution	1,930,859	2,601,879	3,206,389	3,209,725	(Note 2)

Note 1: The financial information above has been audited by CPAs.
Note 2: 2020 earning distribution has not been resolved by the shareholders' meeting

4. Condensed Statement of Comprehensive Income of the Company

Unit: NT$ (thousand)

Year / Item	2016	2017	2018	2019	2020
Operating revenue	2,324,578	3,254,621	4,258,258	4,648,931	3,592,984
Operating margin	133,574	327,868	338,106	214,786	174,022
Net operating income	51,128	237,064	244,597	98,410	65,639
Non-operating income and expenses	165,520	212,767	196,636	68,813	100,699
Net profit before tax	216,648	449,831	441,233	167,223	166,338
Net income from continuing operations	216,661	411,530	393,022	128,016	155,164
Net loss from discounting operations	-	-	-	-	-
Net income (loss)	216,661	411,530	393,022	128,016	155,164
Other comprehensive income (Profit after tax)	(28,169)	4,157	(4,496)	(12,070)	(4,347)
Total comprehensive income of the current period	188,492	415,687	388,176	112,997	155,420
Net income attributes to shareholders of the parent	216,661	411,530	393,022	128,016	155,164
Net profit attributable to non-controlling interest	-	-	-	-	-
Total comprehensive income attributable to owners of the parent	188,492	415,687	388,176	112,997	155,420
Total comprehensive income attributable to owners of the non-controlling interest	-	-	-	-	-
Earnings per share (EPS)	3.01	5.4	4.63	1.4	1.73

Note 1: The financial information above has been audited by CPAs.

(II) Name of the CPAs and Audit Opinions in the Recent Five Years

Year	Accounting Firm	Name of CPA	Audit Opinion
2016	Deloitte Taiwan	Chen, Jing-Zhang; Fang, Su-Li	Unqualified opinion
2017	KPMG Taiwan	Yu, Wan-Yuan; Yu, Chi-Lung	Unqualified opinion (Addressed matters or other matters: the previous periods were audited by other CPAs)
2018	KPMG Taiwan	Yu, Wan-Yuan; Yu, Chi-Lung	Unqualified opinion
2019	KPMG Taiwan	Yu, Wan-Yuan; Yu, Chi-Lung	Unqualified opinion
2020	KPMG Taiwan	Yu, Wan-Yuan; Yu, Chi-Lung	Unqualified opinion

II. Financial Information for the Most Recent Five Years

(I) Consolidated Financial Analysis of the Company

Analysis Item / Year		2016	2017	2018	2019	2020	As of March 31, 2021
Financial Structure	Debt to Assets Ratio (%)	52.54	43.18	42.91	41.84	44.99	44.69
	Long Term Funds to Property, Plant and Equipment Ratio (%)	137.71	139.81	141.40	132.13	128.54	145.78
Solvency	Current Ratio (%)	161.86	168.64	158.73	155.26	141.57	158.69
	Quick Ratio (%)	87.27	80.69	59.56	72.09	66.78	85.9
	Interest protection multiples	13.00	17.96	12.86	6.69	11.82	28.76
Operating Abilities	Average Collection Turnover (times)	7.25	7.28	8.66	10.24	9.15	9.68
	Average collection days	50	50	42	36	40	38
	Inventory turnover (times)	3.76	3.91	3.76	3.63	3.58	4.52
	Accounts payable turnover (times)	20.02	20.19	29.24	32.17	26.31	28.56
	Average inventory turnover days	97	93	97	101	102	81
	Property, plant and equipment turnover (times)	1.42	1.71	1.91	1.71	1.35	1.71
	Total Assets Turnover (times)	0.79	0.91	0.97	0.89	0.75	0.87
Profitability Abilities	ROA (%)	5.20	8.65	7.12	2.60	2.55	5.09
	ROE (%)	9.82	15.39	11.53	3.73	4.13	8.89
	Pre-tax profit to paid-in capital (%)	35.63	61.19	57.88	24.51	22.19	48.72

Analysis Item \ Year		2016	2017	2018	2019	2020	As of March 31, 2021
	Net profit margin (%)	5.88	8.86	6.80	2.40	3.13	5.63
	Earnings per share (NT$)	3.01	5.40	4.63	1.40	1.73	1.00
Cash flow	Cash flow ratio (%)	16.81	6.11	-	63.97	16.27	(5.75)
	Cash flow adequacy (%)	47.17	31.82	7.65	40.79	41.96	33.13
	Cash flow reinvestment ratio (%)	1.54	-	-	13.56	3.11	-
Leverage	Operating leverage	2.31	1.33	1.39	1.98	2.27	1.62
	Financial leverage	1.34	1.08	1.09	1.20	1.10	1.04

Please explain the reasons for all financial ratio fluctuations within the most recent two years. (Analysis may be waived if changes are less than 20%)

1. Interest protection multiples decrease: Mainly because the interest rate of borrowing in 2020 is lower, and thus the interest cost decreased.
2. Property, plant and equipment turnover decreased: Mainly because the sales volume and value decreased, and the subsidiary, Uranus Chemicals, has a plant in progress for expanding operations.
3. Net profit margin increased: mainly because the margin of the period increased and thus the net profit after tax increased.
4. EPS increased: mainly because the net profit after tax increased.
5. Cash flow ratio decreased: Mainly because the materials in-stock increased and the price hike of materials resulted in cash outflow.
6. Cash flow ratio and cash flow reinvestment ratio decreased: Mainly because of the increased cash outflow resulted from the consideration of the raw material prices in the international market and materials in-stock.

Note 1: The financial information above has been audited by CPAs.

Note 2: As of the publication date of the annual report, if the Company whose share is listed in TWSE or traded at OTC has financial statements audited or reviewed by CPAs, these shall be analyzed, too.

Note 3: Formula of financial analysis calculation:

1. Financial structure
   (1) Debt to Assets Ratio = Total Liabilities / Total Assets.
   (2) Long-term Fund to Fixed Assets Ratio = (Shareholders' Equity + Long-term Liabilities) / Net Fixed Assets.
2. Solvency
   (1) Current Ratio = Current Assets / Current Liabilities.
   (2) Quick Ratio = (Current Assets - Inventories - Prepaid Expenses) / Current Liabilities.
   (3) Times Interest Earned = Earnings before Interest and Taxes / Interest Expenses.
3. Operating Performance Analysis
   (1) Average Collection Turnover (including accounts receivable and notes receivable resulted from business operation) = Net Sales / Average Trade Receivables (including accounts receivable and notes receivable resulted from business operation).
   (2) Days Sales Outstanding = 365 / Average Collection Turnover.
   (3) Average Inventory Turnover = Cost of Sales / Average Inventory.
   (4) Average Payment Turnover (including accounts payables and notes payables resulted from business operation) = Cost of Sales / Average Trade Payables (including accounts payables and notes payables resulted from business operation).
   (5) Average Sales Days = 365 / Average Inventory Turnover.
   (6) Property, Plant and Equipment Turnover = Net Sales / Average Net Property, Plant and Equipment.
   (7) Total Assets Turnover = Net Sales / Average Total Assets.
4. Profitability
   (1) Return on Total Assets = (Net Income + Interest Expenses * (1 - Effective Tax Rate)) / Average Total Assets.

(2) Return on Equity = Net Income / Average Total Equity.
(3) Net Margin = Net Income / Net Sales.
(4) Earnings Per Share = (Net Income - Preferred Stock Dividend) / Weighted Average Number of Shares Outstanding. (Note 4)

5. Cash Flow
(1) Cash Flow Ratio = Net Cash Provided by Operating Activities / Current Liabilities.
(2) Cash Flow Adequacy Ratio = Five-year Sum of Cash from Operations / Five-year Sum of Capital Expenditures, Inventory Additions, and Cash Dividend.
(3) Cash Flow Reinvestment Ratio = (Cash Provided by Operating Activities - Cash Dividends) / (Property, Plant and Equipment + Long-term Investments + Other Assets + Working Capital). (Note 5)

6. Leverage:
(1) Operating Leverage = (Net Sales - Variable Cost) / Income from Operations (Note 6) (Note 6)
(2) Financial Leverage = Operating Profit / (Operating Profit - Interest Expenses)

Note 4: The calculation of the earnings per share of the preceding paragraph shall pay special attention to the following:
1. Based on the weighted average number of ordinary shares, rather than the number of shares issued at the end of the year.
2. Where there is a cash replenishment or treasury stock trading, the weighted average number of shares shall be calculated during the period of circulation.
3. Where there is a surplus to capital increase or capital surplus to capital increase, the calculation of the earnings per share for the previous year and half year should be adjusted by the proportion of capital increase, rather than the period the capital increase is issued.
4. If the preferred shares are non convertible accumulative shares, its annual dividend (whether or not it is issued) shall be deductible from the net income or increased to net loss after tax. If the preferred shares are non-cumulative preferred shares, when there is a net profit after tax, the dividend of preferred shares should be deducted from net profit after tax; if there is a net loss after tax, no adjustment is required.

Note 5: The following should be taken more consideration when analyzing cash flows:
1. Net cash flow from operating activities is net cash flow from operating activities in Cash Flow Analysis.
2. Capital expenditure refers to cash outflow for capital expenditure every year.
3. The increase in inventories shall only be credited when the balance at the end of the period is greater than the balance at the beginning of the period. If the inventory is reduced at the end of the year, then the inventory amount should be accounted for at zero.
4. Cash dividends include cash dividends for common stock and special shares.
5. Property, plant, and equipment refer to property, plant, and equipment before depreciation.

Note 6: The issuer shall distinguish between the operating costs and operating expenses being fixed or variables. When involved in the estimation or subjective judgments, one should pay attention to its rationality and consistency.

Note 7: If the Company's shares are no par or not in the denomination of NT$10, the calculation of the ratio of the paid in capital shall be calculated based on the equity ratio of the balance sheet attributable to the owners of the parent company.

(II) Parent Company-Only Financial Analysis of the Company

Item	Year	2016	2017	2018	2019	2020
Financial Structure	Debt to Assets Ratio (%)	41.45	33.82	32.23	32.33	34.42
	Long Term Funds to Property, Plant and Equipment Ratio (%)	928.64	593.42	691.25	701.45	827.37
Solvency Abilities	Current Ratio (%)	145.44	141.34	148.5	168.58	166.23
	Quick Ratio (%)	69.53	57.97	41.32	66.85	62.05
	Interest protection multiples	26.95	23.11	16.17	8.09	18.74
Operating Abilities	Average Collection Turnover (times)	7.19	7.77	9.58	13.26	12.02
	Average collection days	50	47	38	28	30
	Inventory turnover (times)	4.48	4.37	3.84	3.81	3.67
	Accounts payable turnover (times)	27.62	23.95	42.89	43.07	26.2
	Average inventory turnover days	81	84	95	96	99
	Property, plant and equipment turnover (times)	7.41	7.65	8.11	8.84	7.23
	Total Assets Turnover (times)	0.69	0.82	0.9	0.92	0.73
Profitability Abilities	ROA (%)	6.93	10.76	8.77	2.91	3.3
	ROE (%)	11.23	16.47	12.35	3.75	4.72
	Pre-tax profit to paid-in capital (%)	28.61	52.02	47.47	17.98	17.88
	Net profit margin (%)	9.32	12.64	9.23	2.75	4.32
	Earnings per share (NT$)	3.01	5.4	4.63	1.4	1.73
Cash flow	Cash flow ratio (%)	-	-	-	-	-
	Cash flow adequacy (%)	39.57	6.6	-	-	-
	Cash flow reinvestment ratio (%)	-	-	-	14.27	-
Leverage	Operating leverage	1.56	1.15	1.23	1.69	2.21
	Financial leverage	1.56	1.09	1.14	1.32	1.17

Please explain the reasons for all financial ratio fluctuations within the most recent two years. (Analysis may be waived if changes are less than 20%)

1. Interest protection multiples increased: mainly because that the interest rate of borrowing in 2020 is lower, and thus the interest cost decreased.
2. Receivable turnover decreased: mainly because the power battery production decreased and thus the procured materials decreased.
3. Total asset turnover decreased: mainly because the sales volume and value decreased.
4. ROE and net profit margin increased: mainly because the margin of the period increased and thus the net profit after tax increased.
5. EPS increased: mainly because the net profit after tax increased.
6. Cash flow reinvestment ratio decreased: mainly because the cash outflow resulted from the consideration of the raw material prices in the international market and materials in-stock.
7. Operating leverage increased: mainly because the gross profit of the period increased and the operating expenses decreased.

Note 1: The financial information above has been audited or reviewed by CPAs.

Note 2: As of the publication date of the annual report, if the Company whose share is listed in TWSE or traded at OTC has financial statements audited or reviewed by CPAs, these shall be analyzed, too.

Note 3: Formula of financial analysis calculation:

1. Financial structure
   (1) Debt to Assets Ratio = Total Liabilities / Total Assets.
   (2) Long-term Fund to Fixed Assets Ratio = (Shareholders' Equity + Long-term Liabilities) / Net Fixed Assets.
2. Solvency
   (1) Current Ratio = Current Assets / Current Liabilities.
   (2) Quick Ratio = (Current Assets - Inventories - Prepaid Expenses) / Current Liabilities.
   (3) Times Interest Earned = Earnings before Interest and Taxes / Interest Expenses.
3. Operating Performance Analysis
   (1) Average Collection Turnover (including accounts receivable and notes receivable resulted from business operation) = Net Sales / Average Trade Receivables (including accounts receivable and notes receivable resulted from business operation).
   (2) Days Sales Outstanding = 365 / Average Collection Turnover.
   (3) Average Inventory Turnover = Cost of Sales / Average Inventory.
   (4) Average Payment Turnover (including accounts payables and notes payables resulted from business operation) = Cost of Sales / Average Trade Payables (including accounts payables and notes payables resulted from business operation).
   (5) Average Sales Days = 365 / Average Inventory Turnover.
   (6) Property, Plant and Equipment Turnover = Net Sales / Average Net Property, Plant and Equipment.
   (7) Total Assets Turnover = Net Sales / Average Total Assets.
4. Profitability
   (1) Return on Total Assets = (Net Income + Interest Expenses * (1 - Effective Tax Rate)) / Average Total Assets.
   (2) Return on Equity = Net Income / Average Total Equity.
   (3) Net Margin = Net Income / Net Sales.
   (4) Earnings Per Share = (Net Income - Preferred Stock Dividend) / Weighted Average Number of Shares Outstanding. (Note 4)
5. Cash Flow
   (1) Cash Flow Ratio = Net Cash Provided by Operating Activities / Current Liabilities.
   (2) Cash Flow Adequacy Ratio = Five-year Sum of Cash from Operations / Five-year Sum of Capital Expenditures, Inventory Additions, and Cash Dividend.
   (3) Cash Flow Reinvestment Ratio = (Cash Provided by Operating Activities - Cash Dividends) / (Property, Plant and Equipment + Long-term Investments + Other Assets + Working Capital). (Note 5)
6. Leverage:

(1) Operating Leverage = (Net Sales - Variable Cost) / Income from Operations (Note 6)
(2) Financial Leverage = Operating Profit / (Operating Profit - Interest Expenses)

Note 4: The calculation of the earnings per share of the preceding paragraph shall pay special attention to the following:

1. Based on the weighted average number of ordinary shares, rather than the number of shares issued at the end of the year.
2. Where there is a cash replenishment or treasury stock trading, the weighted average number of shares shall be calculated during the period of circulation.
3. Where there is a surplus to capital increase or capital surplus to capital increase, the calculation of the earnings per share for the previous year and half year should be adjusted by the proportion of capital increase, rather than the period the capital increase is issued.
4. If the preferred shares are non convertible accumulative shares, its annual dividend (whether or not it is issued) shall be deductible from the net income or increased to net loss after tax. If the preferred shares are non-cumulative preferred shares, when there is a net profit after tax, the dividend of preferred shares should be deducted from net profit after tax; if there is a net loss after tax, no adjustment is required.

Note 5: The following should be taken more consideration when analyzing cash flows:

1. Net cash flow from operating activities is net cash flow from operating activities in Cash Flow Analysis.
2. Capital expenditure refers to cash outflow for capital expenditure every year.
3. The increase in inventories shall only be credited when the balance at the end of the period is greater than the balance at the beginning of the period. If the inventory is reduced at the end of the year, then the inventory amount should be accounted for at zero.
4. Cash dividends include cash dividends for common stock and special shares.
5. Property, plant, and equipment refer to property, plant, and equipment before depreciation.

Note 6: The issuer shall distinguish between the operating costs and operating expenses being fixed or variables. When involved in the estimation or subjective judgments, one should pay attention to its rationality and consistency.

Note 7: If the Company's shares are no par or not in the denomination of NT$10, the calculation of the ratio of the paid in capital shall be calculated based on the equity ratio of the balance sheet attributable to the owners of the parent company.

III. Audit Committee’s Review Report: Please refer to attachment 1.

IV. Most Recent Consolidated Financial Statements Audited by CPAs: Please refer to attachment 2.

V. Most Recent Parent Company-Only Financial Statements Audited by CPAs: Please refer to attachment 3.

VI. For the Most Recent Year until the Publication Date of the Annual Report, Financial Position Impacted by Insolvency Incidents Encountered by the Company and Affiliates Should be Detailed: None.

Seven. Review of Financial Position, Business Performance, and Risk Issues

I. Financial Position

(I) Financial Status Comparative Analysis:

Unit: NT$ (thousand)

Item \ Year	2019 December 31	2020 December 31	Difference Amount	Difference %
Current assets	2,936,335	2,980,654	44,319	1.51%
Property, plant and equipment	3,842,821	3,977,135	134,314	3.50%
Total assets	6,968,856	7,217,549	248,693	3.57%
Current liabilities	1,891,288	2,105,457	214,169	11.32%
Non-current liabilities	1,024,629	1,141,663	117,034	11.42%
Total liabilities	2,915,917	3,247,120	331,203	11.36%
Capital Share	930,293	930,293	0	0.00%
Capital surplus	1,599,457	1,603,253	3,796	0.24%
Retained earnings	825,786	868,001	42,215	5.11%
Other equity interests	(20,128)	(18,558)	1,570	-7.80%
Treasury stock	(14,048)	(129,796)	(115,748)	823.95%
Non-controlling interest	731,579	717,236	(14,343)	-1.96%
Total equity	4,052,939	3,970,429	(82,510)	-2.04%

(II) Reasons of any material change in the company's assets, liabilities, or equity (change is over 20% between two consecutive periods, and the amount of change exceeding NT$10 million) during the past 2 fiscal years:

Increased treasury shares, mainly because in 2020 the Company bought back 2,025 thousand shares.

(III) Effect: No material effect

(IV) Future response: Not applicable

II. Financial Performance

(I) Financial performance comparative analysis

Unit: NT$ thousand

Year / Item	2019	2020	Increase/decrease	Change in %
Operating revenue	6,369,520	5,285,365	(1,084,155)	-17.02%
Operating cost	5,879,580	4,809,896	(1,069,684)	-18.19%
Operating margin	489,940	475,469	(14,471)	-2.95%
Operating expenses	249,322	259,167	9,845	3.95%
Net operating profit	240,618	216,302	(24,316)	-10.11%
Non-operating income and expenses	(12,575)	(9,868)	2,707	-21.53%
Net profit before tax	228,043	206,434	(21,609)	-9.48%
Income tax expense	74,976	40,789	(34,187)	-45.60%
Net profit of the year	153,067	165,645	12,578	8.22%
Other comprehensive income	(15,646)	(921)	14,725	-94.11%
Total comprehensive income of the year	137,421	164,724	27,303	19.87%
Net profit attributable to				
owners of the Company	128,016	155,164	27,148	21.21%
Non-controlling interest	25,051	10,481	(14,570)	-58.16%
Total comprehensive income attributable to				
owners of the Company	112,997	155,420	42,423	37.54%
Non-controlling interest	24,424	9,304	(15,120)	-61.91%

(II) Reasons of any material change in the company's assets, liabilities, or equity (change is over 20% between two consecutive periods, and the amount of change exceeding NT$10 million) during the past 2 fiscal years:

1. Income tax expense decreased: Mainly because the net profit before tax in 2020 decreased.
2. Other comprehensive income increased: Mainly because the fluctuation of the foreign exchange rate in 2019 resulted in the exchange difference from the translated foreign operating institutions’ financial statements.
3. The owners’ net profit and comprehensive income increased: Mainly because of the profit and loss of investments in subsidiaries increased in 2020.

(III) Expected sales volume and their basis: Not applicable

(IV) Possible impact on the Company’s future finance and business: No material impact

(V) Response plan: Not applicable

III. Cash Flow

(I) Analysis of consolidated cash flow changes of the year

Year / Item	2019	2020	Percentage of Increase (Decrease)
Cash flow ratio (%)	63.97	16.27	(74.57)%
Cash flow adequacy (%)	40.79	41.96	2.87%
Cash flow reinvestment ratio (%)	13.56	3.11	(77.06)%
Analysis of fluctuation: Cash flow ratio and cash flow reinvestment ratio decreased: Mainly because of the increased cash outflow and decreased net cash inflow from operating activities resulted from the consideration of the raw material prices in the international market and materials in-stock.			

(II) Plans for improving liquidity

The Company has no concern about illiquidity and insufficient cash.

(III) Analysis of consolidated cash flow for the next year

Unit: NT$ thousand

Cash balance at the beginning of the year	Estimated yearly net cash inflow from operating activities	Estimated yearly net cash outflow	Anticipated Cash Surplus (Shortage)	Cash and cash equivalents Remedies for cash deficits	
				Investment plans	Financial plans
703,928	450,000	(650,000)	567,193	None	Bank borrowings

1. Analysis of cash flow changes for next year:
   It is expected that the Company's business will grow steadily and cash dividends will be paid steadily in the next year. However, cash outflows will be resulted from plant and equipment investment and dividend payment. It is expected that cash will decrease in the next year from the beginning of the period.
2. Response to estimated cash deficit: None

IV. Impacts of Major Capital Expenditures in the Most Recent Year to Financial Performance

1. The Company expanded the production lines of cobalt sulfate crystallization in 2020 in order to meet the demands of customers' orders, improve capacity utilization and maintain product quality. Due to the steady growth of the Company’s performance, it has no significant impact on the company’s finances.
2. To expand the operation as needed, the Company's subsidiaries purchased lands and new plants in cash and bank loans; which has no significant impact on the subsidiaries' finance.

V. Causes of Profit or Loss Incurred on Investments in the Most Recent Year, and Any Improvements or Investments

(I) Policy of reinvestment:

In the most recent year, the Company's reinvestment policy is mainly aiming at responding to business expansion needs and Company development.

(II) Analysis of reasons for profit/loss:

The Company's domestic and foreign reinvestment businesses in recent years resulted in small losses to Uranus Chemicals, CoreMax Ningbo, Jiangxi Tianjiang and CoreMax Thailand due to fluctuations in international metal prices. The remaining investees include overseas companies like Zhuhai, Zhangzhou, and domestic company Heng I Chemical, all have stable profits.

(III) Investment plan in the next year: None

VI. Risk Issues and Assessment for the Most Recent Year until the Publication Date of the Annual Report

(I) The impact of interest rate, exchange rate changes, and inflation on the Company's profit and loss and corresponding future measures:

1. Interest rate

Unit: NT$ thousand

Item	2019		2020	
	Amount	Weight to net sales amount	Amount	Weight to net sales amount
Interest expense	40,055	0.63%	19,087	0.36%

The Company's operating working capital was mainly obtained through financing, and the borrowing interest rate for 2020 was slightly lower than that of the previous year. Moreover, from the above table, it is obvious that the interest expenses of 2020 and 2019 accounted for a very low proportion of the year's revenue, and the impact on profit and loss was limited. Other than properly increasing its own working capital, the Company maintains a close relationship with its correspondent banks, monitors money market interest rates and financial information at all times, and selects the most favorable capital applications and responding measures depending on the cost of funds and possible return and risks, reducing the interest rate risk arising from operations.

2. Exchange rate

Unit: NT$ thousand

Item	2019		2020	
	Amount	Weight to net sales amount	Amount	Weight to net sales amount
Gain (loss) of foreign exchange	(602)	0.01%	(13,885)	0.26%

The Company mainly uses USD as the denominated unit of receivables and payables. Nearly 80% of the receivables and payables are denominated in USD and foreign currencies, resulting in a certain degree of natural hedging benefits. Since the portion of exchange gains and losses to net sales 2020 and 2019 were not high, the exchange rate changes did not significantly impact the Company's operations.

In addition to the continuous management of foreign currency positions, the Company maintains close contact with correspondent banks to obtain more extensive foreign exchange information and preferential exchange rate quotations. The exchange rate changes are less likely to have a significant impact on the Company.

3. Changes of inflation:

The Company's purchases and sales are all based on the market price quotations, and currently there is no major impact due to inflation.

(II) Policies on transactions involving high risks, highly leveraged investments, funds lending to others, endorsement or guarantee and derivatives, the main reasons for the profit or loss of these transactions and future countermeasures:

1. The Company has the “Procedures for Acquiring or Disposing of Assets," the "Operational Procedures for Endorsement/Guarantees" and the "Procedures for Loaning of Funds to Others," all approved by the shareholders' meetings, and are the basis for the Company to execute related transactions.

2. The Company has not engaged in high-risk, high-leverage investments in the most recent year and as of the publication date of the annual report.

3. The Company has endorsed and guaranteed the operations of its subsidiaries Coremax (BVI) Corporation and Uranus Chemicals Co., Ltd. in the most recent

year and as of the publication date of the annual report. The operations of the above transactions are based on the Company's " "Operational Procedures for Endorsement/Guarantees" for execution.

4. In the most recent year of the Company and as of the publication date of the prospectus, to meet the operational needs of the subsidiaries, Coremax (Thailand) Co., Ltd., CoreMax Ningbo Chemical Co., Ltd., and CoreMax (Zhangzhou) Chemical Co., Ltd., the Company, or subsidiary loan of fund to the subsidiaries in need. The operations of loaning of funds were executed pursuant to the "Procedures for Loaning of Funds to Others" of the Company and subsidiaries.

5. The Company trades derivative products only for non-trading purposes. In order to avoid exchange rate risks, based on changes in the foreign exchange market and needs to foreign exchange funding, the Company adopts hedging forward foreign exchange operations in order to minimize the impact of exchange rate changes on the Company's profits and losses.

(III) Future research & development projects and corresponding budget:

1. Future research plan

(1) Short-term plan:

A. Improve the quality of existing products to meeting customers' needs.

B. Improve the manufacturing process to produce products with different physical properties.

(2) Medium and long-term plans

A. Development of a new generation of secondary lithium battery raw materials, with a development plan for nickel, cobalt, and manganese hydroxides in various proportions.

B. Development of new reclaiming technologies and processes for cobalt and manganese metal, to increase reclaiming yield, efficiency and quality.

2. Estimated R&D Expenses

The company's R&D direction will continue to optimize the production process and improve product quality, thereby improving the production efficiency of various products, avoiding the waste of raw materials, strengthening the technology of raw material reclaiming and recycling, and strengthening the competitive advantages.

The Company's R&D composition consists of process R&D and new product development. Since the machine equipment is an existing production process equipment or has been purchased in recent years, it is expected that the investment in this part of the R&D expenses will still be mainly based on the salaries of R&D unit's personnel mainly. The remaining small part is a small amount of material expenses. It is estimated that the future R&D expenses will be about NT$25,000 thousand, which will account for about 10% of the total annual operating expenses.

(IV) Effects of and response to changes in local and foreign policies and regulations relating to corporate finance and sales:

The daily operations are handled pursuant to the relevant domestic and foreign laws and regulations. The Company also monitors domestic and foreign policy development trends and changes in regulations to fully grasp and respond to changes in the market environment. Therefore, as of the annual report's publication date, the changes in domestic and foreign policies have no significant impact on the Company's finance and business.

(V) Effects of and response to changes in technology and the industry relating to corporate finance and sales:

The Company always monitors the technological changes and technological development evolution related to the industry in which it operates, and quickly grasps the industry movements. In addition, it continuously strengthens and improves its own R&D capabilities and actively expands future market applications. Therefore, technological changes and industrial changes affect the Company positively.

(VI) Impact of change in the corporate image on crisis management and countermeasures:

The Company insists on the business philosophy of ethics and pragmatism. As of the publication date of the annual report, no incidents that could affect the corporate image have occurred, and the Company has issued a corporate social responsibility report.

(VII) Expected benefits from, risks relating to, and response to merger and acquisition plans:

The Company has no plans to conduct mergers and acquisitions in the most recent year and as of the date of publication of the annual report. In the future, shall there be the evaluation and implementation of the aforementioned related plans, they will be handled pursuant to relevant laws and regulations and various internal management procedures of the Company.

(VIII) Expected benefits from, risks relating to, and response to factory expansion plans:

The Company's subsidiaries, Heng I Chemical and Uranus Chemicals, have purchased new lands and constructed plants for the consideration of industrial development and necessary expansion of operations. These have been implemented pursuant to the relevant regulations and laws while complying with the internal management procedures of the Company and its subsidiaries, seeking to achieve the expected benefits and simultaneously reduce possible risk factors.

(IX) Risks relating to and responses to excessive concentration of purchasing sources and excessive customer concentration: None.

1. Risk assessment of concentrated purchases and countermeasures

The Company's top ten suppliers are mostly well-known foreign suppliers of metal raw materials, chemical raw materials and fertilizer raw materials. The proportion of purchases from a single supplier is less than 30%, so there is no centralized purchase.

As the metal supply in the world is currently an oligopolistic market, for the Company’s metal raw materials, the Company has business with major manufacturers in the world, and it usually allocates purchases based on cost considerations. The Company monitors changes in the supply of raw materials in the market. It maintains business with two or more suppliers for the purchase of main raw materials, with regular supplier surveys and evaluations, to ensure a stable source of supply. Therefore, the concentration risk of purchases should be reasonably controlled.

In a nutshell, the Company actively evaluates market information and market conditions for purchases. It continues to develop outstanding high-quality suppliers to diversify the risk of centralized purchases from a single supplier. The Company is not supposed to have the risk of excessive concentration of purchases.

2. Risk assessment of concentrated sales and countermeasures

The Company’s main business is a manufacturer of oxidation catalysts, power battery materials, compound fertilizers and specialty chemical materials. Its product applications are in the chemical fiber, secondary lithium battery, agriculture and electronics industries, and sales customers are all well-known companies or agents in the industry. From 2017 to 2019, no single customer accounted for more than 30% of the year’s net revenue. Still, the net revenue ratio to CP in 2020 was 30.23%, due to the relatively higher proportion of other customers affected by COVID-19, and to meet the needs of end customers, the sales to other customers were reduced.

Based on industry experience, the Company will continue to expand new customer sources and develop product application markets with its stable product quality to diversify sales risks. There should be no excessive reliance on a single customer or customer source. As far as the sales target is concerned, in addition to the stable and good cooperation relationship with customers, the products and quality supplied by the Company are able to meet the needs of customers, and it is a long-term partner of well-known domestic and overseas customers.

(X) Effects of, risks relating to, and response to large share transfers or changes in shareholdings by Directors, or Shareholders with shareholdings of over 10%: None.

(XI) Effects of, risks relating to, and response to the changes in management: None.

(XII) Litigious and non-litigious matters. List major litigious, non-litigious or administrative disputes that: (1) involve the company and/or any company director, any company supervisor, the general manager, any person with actual responsibility for the firm, any major shareholder holding a stake of greater than 10 percent, and/or any company or companies controlled by the company; and (2) have been concluded by means of a final and unappealable judgment, or are still under litigation: None.

(XIII) Other important risks and mitigation measures being or to be taken: None.

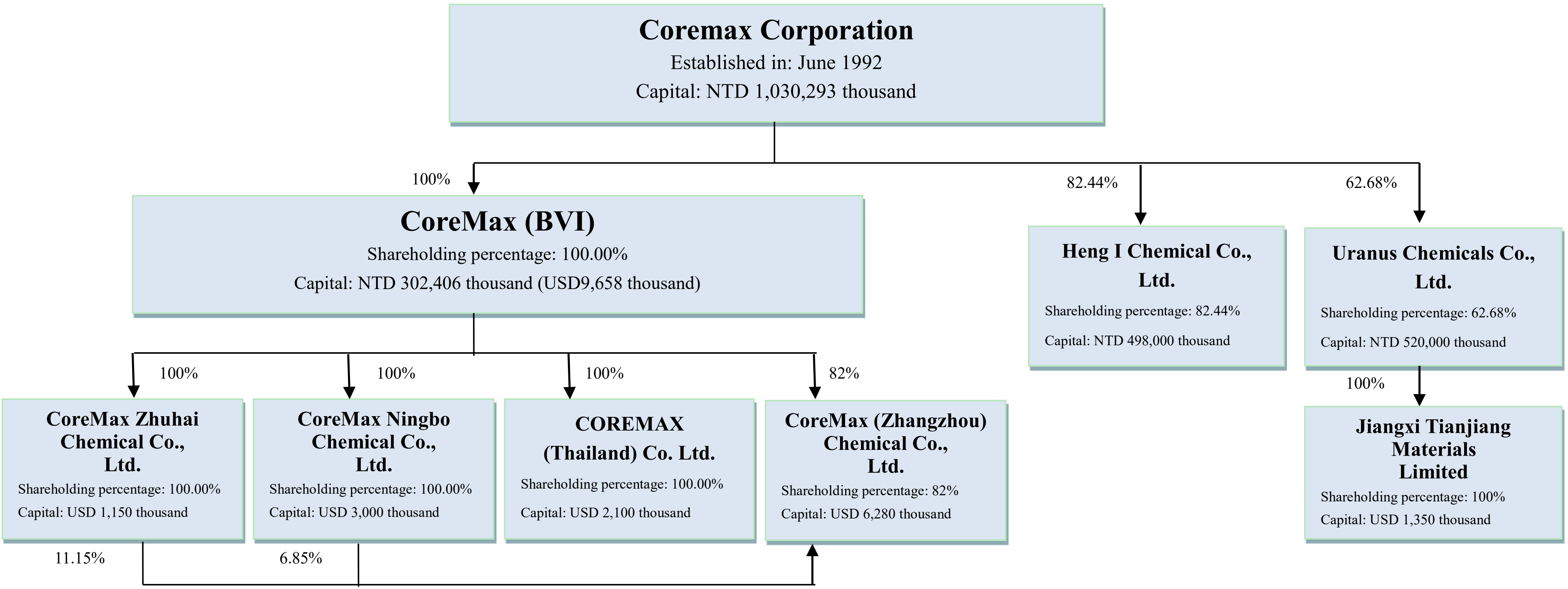
VII. Other Material Issues: None.

Eight. Special Disclosure

I. Summary of Affiliated Companies

(I) Affiliate Organizational Chart

Date: May 7, 2021



2. Basic information of Affiliates

Date April 30, 2021; NTD thousand

Name of Company	Date of Establishment	Address	Paid-in-capital amount	Major operations / production item
Coremax (BVI) Corporation	November 2001	BVI	USD9,658	Investment to various business
CoreMax Zhuhai Chemical Co., Ltd.	December 2001	Zhuhai, China	USD1,150	Oxidation catalysts
CoreMax Ningbo Chemical Co., Ltd.	September 2004	Ningbo, China	USD3,000	Oxidation catalysts
CoreMax (Zhangzhou) Chemical Co., Ltd.	October 2011	Zhangzhou, China	USD6,280	Oxidation catalysts
Coremax (Thailand) Co., Ltd.	March 2009	Rayong, Thailand	USD2,100	Oxidation catalysts
Heng I Chemical Co., Ltd.	May 1961	Miaoli, Taiwan	NTD498,000	Organic/chemical fertilizer
Uranus Chemicals Co., Ltd.	July 1975	Hsinchu, Taiwan	NTD520,000	Oxalic acid, oxalate, etching solution, rare earth chemicals
Jiangxi Tianjiang Materials Limited	January 2001	Jiangxi, China	USD1,350	Oxalate

3. Information of common shareholders of the companies presumed to be controller and subordinate: None.

4. Industries covered by all Affiliates, their interactions and division of works:

Name of Company	Operating business	Relationship to the Company	Division of works
Coremax (BVI) Corporation	Investee	Subsidiary of the Company	Investment in various businesses
CoreMax Zhuhai Chemical Co., Ltd.	Manufacturing and sales of oxidation process catalysts	Sub-subsidiary re-invested through Coremax (BVI) Corporation	The major raw materials are procured by the Headquarter, with local production, and serve the customer in Mainland China.
CoreMax Ningbo Chemical Co., Ltd.	Manufacturing and sales of oxidation process catalysts	Sub-subsidiary re-invested through Coremax (BVI) Corporation	The major raw materials are procured by the Headquarter, with local production, and serve the customer in Mainland China.
CoreMax (Zhangzhou) Chemical Co., Ltd.	Manufacturing and sales of oxidation process catalysts	Sub-subsidiary re-invested through Coremax (BVI) Corporation	The major raw materials are procured by the Headquarter, with local production, and serve the customer in Mainland China.
Coremax (Thailand) Co.,LTD.	Manufacturing and sales of oxidation process	Sub-subsidiary re-invested through Coremax (BVI)	The major raw materials are procured by the Headquarter,

	catalysts	Corporation	with local production, and serve the customer in Southeast Asia.
Heng I Chemical Co., Ltd.	Manufacturing and sales of fertilizer and chemical engineering materials	Subsidiary of the Company	Not applicable.
Uranus Chemicals Co., Ltd.	Manufacturing and sales of oxalic acid etching solution, oxalate, and rare earth	Subsidiary of the Company	Not applicable.
Jiangxi Tianjiang Materials Limited	Manufacturing and sales of oxalic acid etching solution, oxalate, and rare earth	The sub-subsidiary reinvested through Uranus Chemicals Co., Ltd.	Not applicable.

5. Affiliated companies

Name of Company	Position	Name	Spouse and child of minor age	
			Shares (thousand shares)	Percentage of shareholding
Coremax (BVI) Corporation	Chairman	Ho, Chi-Cheng	9,658	100.00%
CoreMax Zhuhai Chemical Co., Ltd.	Chairman	Ho, Chi-Cheng	(Note)	100.00%
CoreMax Ningbo Chemical Co., Ltd.	Chairman	Ho, Chi-Cheng	(Note)	100.00%
CoreMax (Zhangzhou) Chemical Co., Ltd.	Chairman	Ho, Chi-Cheng	(Note)	82.00%
Coremax (Thailand) Co., Ltd.	Chairman	Ho, Chi-Cheng	70	100.00%
Heng I Chemical Co., Ltd.	Chairman	Ho, Chi-Cheng	41,058	82.44%
Uranus Chemicals Co., Ltd.	Chairman	Ho, Chi-Cheng	32,592	62.67%
Jiangxi Tianjiang Materials Limited	Chairman	Ho, Chi-Cheng	(Note)	100.00%

Note 1: This is a limited company so there are no shares

(II) Operational Highlights of Affiliated Companies

Date: December 31, 2020; Unit: NT$thousand

Name of Company	Capital	Total assets	Total liabilities	Net value	Operating revenue	Operating income	Profit (loss) (after tax) of the period	Earnings per share (NT$) (after tax)
Coremax (BVI) Corporation	302,406	526,793	51,264	475,529	0	(391)	37,444	3.88
CoreMax Zhuhai Chemical Co., Ltd.	38,775	110,395	14,835	95,561	86,830	(3,682)	(2,498)	(Note 2)

CoreMax Ningbo Chemical Co., Ltd.	98,482	192,157	26,542	165,615	189,422	1,552	2,290	(Note 2)
CoreMax (Zhangzhou) Chemical Co., Ltd.	185,654	250,188	72,927	177,261	289,059	31,994	30,279	(Note 2)
Coremax (Thailand) Co., Ltd.	67,047	96,032	40,965	55,067	79,355	5,149	6,023	86.04
Heng I Chemical Co., Ltd.	498,000	2,481,690	965,772	1,515,918	1,211,672	155,808	136,912	3.44
Uranus Chemicals Co., Ltd.	520,000	1,801,640	676,909	1,124,731	228,424	(54,658)	(69,567)	(1.37)
Jiangxi Tianjiang Materials Limited	43,947	20,015	3,029	16,986	0	(5,309)	(4,868)	(Note 2)

Note 1: Coremax (Thailand) Co., Ltd., 1,000 Baht per share.

Note 2: it is a limited company, so it is not calculated.

II. Private Placement of Securities in the Most Recent Year until the Publication Date of the Annual Report: None

III. For the Most Recent Year until the Publication Date of the Annual Report, the Shareholding or Disposal of Shares of the Company by Subsidiaries:

Date: April 30, 2021

Subsidiary Name	Paid-in Capital	Source of Funds	The Company Percentage of shareholding	Date of Acquisition or Disposal	Shares and amount acquired	Shares and amount acquired	Investment profit or loss	Shares and amount held at the end of the year or up to the publication date of the annual report	Pledge status	Amount of endorsement/guaranteed provided to subsidiaries by the Company	Amount loaned to the subsidiaries by the Company
Uranus Chemicals Co., Ltd.	520,000	Self-owned Source of funds	62.67%	Before the recent two years	2,869,996 shares	-	(22,601)	3,013,495 shares NT$ 22,434 thousand (cost) NT$ 210,945 thousand (after valuation)	None.	NT$100,000 thousand	None
				November 1, 2013	143,499 shares (Note 1)	-			None.		None
				The year up to the publication date of the annual report	3,013,495 shares NT$22,434 thousand	-			None.		None

Note 1: Gain from share dividend distribution

IV. Other supplementary information: None.

V. Any of the situations listed in Article 36, paragraph 3, subparagraph 2 of the Securities and Exchange Act, which might materially affect shareholders' equity or the price of the company's securities, has occurred during the most recent fiscal year or the current fiscal year up to the date of publication of the annual report: None.

Attachment 1

Audit Committee's Report

Coremax Corporation
Audit Committee's Report

It is agreed to and resolved by the Audit Committee and the Board of Directors that the Company's FY2020 Business Report, Financial Statement, Consolidated Financial Reports, and Proposal for Earning Distribution. Among them, Financial Statement and Consolidated Financial Reports were audited and certified by YU, WAN-YUAN and Chi-Long Yu, CPAs of KPMG in Taiwan, and an audit report which refers to the Financial Statement and Consolidated Financial Reports was issued.

The Business Report, Financial Statement, Consolidated Financial Reports, and Proposal for Earning Distribution have been reviewed and determined to be correct and accurate by the Audit Committee members of Coremax Corporation. According to Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act, we hereby submit this report.

To
2021 Annual Meeting of Shareholders of Coremax Corporation

Chairman of the Audit Committee : WANG, WEN-TSUNG

Date: February 26, 2021

Attachment 2

Consolidated financial statements of the recent year, audited and certified by CPAs

Stock Code:4739

Coremax Corporation and Subsidiaries

Consolidated Financial Statements

With Independent Auditors' Report
For the Years Ended December 31, 2020 and 2019

The independent auditors' report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and consolidated financial statements, the Chinese version shall prevail.

Table of contents

Representation Letter

The entities that are required to be included in the combined financial statements of Coremax Corporation as of and for the year ended December 31, 2020 under "the Criteria Governing the Preparation of Affiliation Reports, Consolidated Business Reports, and Consolidated Financial Statements" of Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in conformity with International Financial Reporting Standards No. 10 endorsed by the Financial Supervisory Commission, "Consolidated Financial Statements." In addition, the information required to be disclosed in the combined financial statements is included in the above-mentioned consolidated financial statements. Consequently, Coremax Corporation and Subsidiaries do not prepare a separate set of combined financial statements.

Company name: Coremax Corporation
Chairman: Chi-Cheng Ho
Date: February 26, 2021

KPMG
安侯建業聯合會計師事務所
KPMG
新竹市科學工業園區30078展業一路11號
No. 11, Prosperity Road I, Hsinchu Science Park,
Hsinchu, 30078, Taiwan, R.O.C.
Telephone 電話 + 886 (3) 579 9955
Fax 傳真 + 886 (3) 563 2277
Internet 網址 kpmg.com/tw

Independent Auditors' Report

To the Board of Directors
Coremax Corporation:

Opinion

We have audited the consolidated financial statements of Coremax Corporation ("the Company") and its subsidiaries ("the Group"), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and with the International Financial Reporting Standards ("IFRSs"), International Accounting Standards ("IASs"), interpretations as well as related guidance endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Certification of Financial Statements by Certified Public Accountants and the auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the Certified Public Accountants Code of Professional Ethics in the Republic of China ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Based on our judgment, the key audit matters should be reflected in our report are as follow:

1. Loss allowance assessment of Receivables

   Please refer to Note 4(7) "Financial instruments" for the accounting policies of loss allowance assessment of receivables, Note 5 " for the relevant accounting estimation, and major sources of assumption uncertainty"; and Note 6(4) "Notes and accounts receivable, net" to the consolidated financial statements for the details of relevant disclosures.

Description of key audit matters:

The Group has a worldwide customer base. As such, the Group may encounter difficulty in obtaining financial information of the customers due to the rapid changes in the business environment which included the industry, technology, market, and economic, as well as legal matters. When assessing the expected credit loss of its receivables during its lifetime, the receivables are measured based on the factors such as aging analysis of accounts receivable, customers' financial status, historical collection experience, current market conditions, and consideration of forward-looking information. The assessment of allowance for loss on accounts receivables involved subjective judgment of management, which has been identified as one of our key audit matters.

How the matter was addressed in our audit:

Our main audit procedures included: Obtaining and checking the accuracy of the impairment loss calculation from the management of the accounts receivable ; Checking the completeness of the aging analysis of the receivables and accuracy of the aging bracket by sampling, and analyzing the receivables aging and historical receivables collection record and customer credit risk concentration in measuring the appropriateness of the expected credit loss rate in order to evaluate the reasonableness of the porvision amount of the account receivable loss allowance of the Group, and evaluating the adequacy of the Group' s disclosures in the accounts.

2. Valuation of Inventories

Please refer to Note 4(8) "Inventories" for the accounting policies of inventories valuation, Note 5 "for the relevant accounting estimation, and major sources of assumption uncertainty", and Note 6(5) "Inventories" to the consolidated financial statements for the details of relevant disclosures.

Description of key audit matters:

The Group's inventories are measured at the lower of cost and net realizable value. The Group will exercise judgment in estimating the net realizable value of its inventories as at reporting date. Estimation of net realizable value might subject to significant changes due to the fluctuations of the market and rapid changes in technology. Therefore, estimation of devaluation loss that reduce inventory to market value is one of our key audit matters.

How the matter was addressed in our audit:

Our principal audit procedures included: Understanding and evaluating the assessment performed by the management in calculating the net realizable value, as well as vouching to relevant documents for samples selected; evaluating the adequacy of the provisions policy ; assessing whether the valuation of inventories did follow such policy; and considering the adequacy of the Group's disclosures in the accounts.

Other Matter

The Company has prepared its parent-company-only financial statements as of and for the years ended December 31, 2020 and 2019, on which we have issued an unmodified opinion.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and with the IFRSs, IASs, interpretations as well as related guidance endorsed by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated 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 (including members of the Audit Committee) are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China 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 consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated 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 our 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.

2. 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.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. 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 we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. 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. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We 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 we identify during our audit.

We also provide those charged with governance with a statement that we 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 our independence, and where applicable, related safeguards.

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

The engagement partners on the audit resulting in this independent auditors' report are Wan-Yuan Yu and Chi-Lung Yu.

KPMG

Taipei, Taiwan (Republic of China)
February 26, 2021

Notes to Readers

The accompanying consolidated financial statements are intended only to present the consolidated financial position, financial performance and cash flows in accordance with the accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such consolidated financial statements are those generally accepted and applied in the Republic of China.

The independent auditors' report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and consolidated financial statements, the Chinese version shall prevail.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

Coremax Corporation and subsidiaries

Consolidated Balance Sheets

December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars)

Assets	December 31, 2020 Amount	%	December 31, 2019 Amount	%
Current assets:				
Cash and cash equivalents (note 6(1))	$ 703,928	10	767,193	11
Notes receivable, net (note 6(4))	51,332	1	38,876	1
Accounts receivable, net (note 6(4))	570,007	8	483,304	7
Accounts receivable from related parties (notes 6(4) and 7)	130	-	152	-
Other receivables－related parties (note 7)	22	-	14	-
Inventories (note 6(5))	1,055,685	15	1,415,401	20
Prepayments to suppliers	518,842	7	12,965	-
Other financial assets－current	1,892	-	218,430	3
Other current assets	78,816	-	-	-
	2,980,654	41	2,936,335	42
Non-current assets:				
Financial assets at fair value through other comprehensive income－non-current (note 6(3))	49,203	1	49,297	1
Other financial assets－non-current (note 8)	3,340	-	3,340	-
Property, plant and equipment (notes 6(8) and 8)	3,977,135	55	3,842,821	55
Right-of-use assets (note 6(9))	42,870	1	45,145	1
Deferred tax assets (note 6(15))	47,595	1	41,041	-
Net defined benefit asset－non-current (note 6(14))	12,195	-	10,132	-
Other non-current assets (note 6(2))	104,557	1	40,745	1
	4,236,895	59	4,032,521	58
Total assets	**$ 7,217,549**	**100**	**6,968,856**	**100**

Liabilities and Equity	December 31, 2020 Amount	%	December 31, 2019 Amount	%
Current liabilities:				
Short-term notes and bills payable (note 6(10))	$ 80,000	1	230,000	3
Short-term borrowings (note 6(11))	1,538,966	21	1,025,468	15
Notes payable	45,703	1	72,153	1
Accounts payable	124,612	2	123,203	2
Salary and bonus payable	92,192	1	79,497	1
Payable on machinery and equipment	51,939	1	132,420	2
Current lease liabilities (note 6(13))	5,409	-	5,081	-
Long-term liabilities－current portion (note 6(11))	50,000	1	133,333	2
Other current liabilities	116,636	2	90,133	1
	2,105,457	30	1,891,288	27
Non-current liabilities:				
Long-term borrowings (note 6(11))	814,622	11	707,312	10
Deferred tax liabilities (notes 6(8) and (15))	307,779	4	297,930	5
Net defined benefit liability－non-current (note 6(14))	5,438	-	3,580	-
Deposits received	1,307	-	1,307	-
Non-current lease liabilities (note 6(13))	12,517	-	14,500	-
	1,141,663	15	1,024,629	15
Total liabilities	3,247,120	45	2,915,917	42
Equity (notes 6(6), (12) and (16)):				
Equity attributable to parent company shareholders:				
Ordinary share capital	930,293	13	930,293	13
Capital surplus	1,603,253	22	1,599,457	23
Retained earnings	868,001	12	825,786	12
Other equity interest	(18,558)	-	(20,128)	-
Treasury shares	(129,796)	(2)	(14,048)	-
	3,253,193	45	3,321,360	48
Non-controlling interests (notes 6(6) and (7))	717,236	10	731,579	10
Total equity	3,970,429	55	4,052,939	58
Total liabilities and equity	**$ 7,217,549**	**100**	**6,968,856**	**100**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

Coremax Corporation and subsidiaries

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars, except for earnings per share)

	2020		2019	
	Amount	%	Amount	%
Net operating revenue (notes 6(18) and 7)	$ 5,285,365	100	6,369,520	100
Operating costs (notes 6(5), (13), (14), (19) and 7)	4,809,896	91	5,879,580	92
Gross profit	475,469	9	489,940	8
Operating expenses (notes 6(13), (14), (19) and 7)**:**				
Selling expenses	70,110	1	86,192	1
General administrative expenses	159,619	3	138,402	3
Research and development expenses	29,438	1	26,415	-
Expected credit loss (gain)	-	-	(1,687)	-
Total operating expenses	259,167	5	249,322	4
Net operating income	216,302	4	240,618	4
Non-operating income and expenses:				
Other income (notes 6(20) and 7)	32,505	1	30,101	-
Other gains and losses, net (note 6(20))	(11,878)	-	(6,189)	-
Finance costs (note 6(20))	(19,087)	-	(40,055)	(1)
Interest income (note 6(20))	2,477	-	4,170	-
Foreign exchange gains (loss) (note 6(21))	(13,885)	-	(602)	-
	(9,868)	1	(12,575)	(1)
Income before income tax	206,434	5	228,043	3
Income tax expenses (note 6(15))	40,789	1	74,976	1
Net income	165,645	4	153,067	2
Other comprehensive income:				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurements of defined benefit plans (note 6(14))	(1,130)	-	287	-
Unrealized gains (losses) of financial assets measured at fair value through other comprehensive income	(3,463)	-	(3,927)	-
Income tax related to items that will not be reclassified to profit or loss	-	-	-	-
	(4,593)	-	(3,640)	-
Items that may be reclassified subsequently to profit or loss				
Exchange differences on translation of foreign financial statements	4,759	-	(15,024)	-
Income tax relating to item that may be reclassified subsequently (note 6(15))	1,087	-	(3,018)	-
Total items that may be reclassified subsequently to profit or loss	3,672	-	(12,006)	-
Other comprehensive income	(921)	-	(15,646)	-
Total comprehensive income	**$ 164,724**	**4**	**137,421**	**2**
Net income attributable to:				
Shareholders of the parent	$ 155,164	4	128,016	2
Non-controlling interests	10,481	-	25,051	-
	$ 165,645	**4**	**153,067**	**2**
Total comprehensive income attributable to:				
Shareholders of the parent	$ 155,420	4	112,997	2
Non-controlling interests	9,304	-	24,424	-
	$ 164,724	**4**	**137,421**	**2**
Earnings per share (New Taiwan Dollars) (note 6(17))**:**				
Basic earnings per share	**$**	**1.73**		**1.40**
Diluted earnings per share	**$**	**1.73**		**1.40**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)
Coremax Corporation and subsidiaries
Consolidated Statements of Changes in Equity
For the years ended December 31, 2020 and 2019
(Expressed in Thousands of New Taiwan Dollars)

	Share capital				Retained earnings				Other equity interest						
	Ordinary share capital	Advance receipts for share capital	Total share capital	Capital surplus	Legal reserve	Special reserve	Retained earnings	Total	Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income	Total other equity interest	Treasury shares	Subtotal of equity attributable to the shareholders of the parent	Non-controlling interests	Total equity
Balance at January 1, 2019	$ 928,452	965	929,417	1,581,736	170,151	17,200	824,554	1,011,905	(5,688)	779	(4,909)	(14,066)	3,504,083	654,222	4,158,305
Net income for the period	-	-	-	-	-	-	128,016	128,016	-	-	-	-	128,016	25,051	153,067
Other comprehensive income (loss) for the period	-	-	-	-	-	-	200	200	(12,070)	(3,149)	(15,219)	-	(15,019)	(627)	(15,646)
Total comprehensive income (loss) for the period	-	-	-	-	-	-	128,216	128,216	(12,070)	(3,149)	(15,219)	-	112,997	24,424	137,421
Appropriation and distribution of retained earnings:															
Appropriated legal reserve	-	-	-	-	39,302	-	(39,302)	-	-	-	-	-	-	-	-
Cash dividends of ordinary share	-	-	-	-	-	-	(297,694)	(297,694)	-	-	-	-	(297,694)	-	(297,694)
Issuance of new shares for cash by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	-	105,168	105,168
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	-	(36,618)	(36,618)
Adjustment to capital surplus due to non-proportional investment in subsidiary's increase in capital	-	-	-	13,025	-	-	(16,641)	(16,641)	-	-	-	18	(3,598)	3,598	-
Adjustment to capital surplus due to cash dividends distributed to subsidiary	-	-	-	9,643	-	-	-	-	-	-	-	-	9,643	-	9,643
Differences between consideration and carrying amounts of subsidiaries shareholding acquired or disposed of	-	-	-	(8,471)	-	-	-	-	-	-	-	-	(8,471)	(19,215)	(27,686)
Conversion of convertible bonds	1,841	(965)	876	3,524	-	-	-	-	-	-	-	-	4,400	-	4,400
Balance at December 31, 2019	930,293	-	930,293	1,599,457	209,453	17,200	599,133	825,786	(17,758)	(2,370)	(20,128)	(14,048)	3,321,360	731,579	4,052,939
Net income for the period	-	-	-	-	-	-	155,164	155,164	-	-	-	-	155,164	10,481	165,645
Other comprehensive income (loss) for the period	-	-	-	-	-	-	(1,314)	(1,314)	4,347	(2,777)	1,570	-	256	(1,177)	(921)
Total comprehensive income	-	-	-	-	-	-	153,850	153,850	4,347	(2,777)	1,570	-	155,420	9,304	164,724
Appropriation and distribution of retained earnings:															
Appropriated legal reserve	-	-	-	-	12,802	-	(12,802)	-	-	-	-	-	-	-	-
Appropriated special reserve	-	-	-	-	-	2,930	(2,930)	-	-	-	-	-	-	-	-
Cash dividends of ordinary share	-	-	-	-	-	-	(111,635)	(111,635)	-	-	-	-	(111,635)	-	(111,635)
Cash dividends distributed by subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-	-	(23,252)	(23,252)
Treasury stock acquired	-	-	-	-	-	-	-	-	-	-	-	(115,748)	(115,748)	-	(115,748)
Adjustment to capital surplus due to cash dividends distributed to subsidiary	-	-	-	3,696	-	-	-	-	-	-	-	-	3,696	-	3,696
Differences between consideration and carrying amounts of subsidiaries shareholding acquired or disposed of	-	-	-	100	-	-	-	-	-	-	-	-	100	(395)	(295)
Balance at December 31, 2020	**$ 930,293**	**-**	**930,293**	**1,603,253**	**222,255**	**20,130**	**625,616**	**868,001**	**(13,411)**	**(5,147)**	**(18,558)**	**(129,796)**	**3,253,193**	**717,236**	**3,970,429**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

Coremax Corporation and subsidiaries

Consolidated Statements of Cash Flows

For the years ended December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars)

		2020	2019
Cash flows from operating activities:			
Income before income tax	$	206,434	228,043
Adjustments:			
Adjustments to reconcile profit:			
Depreciation		274,042	236,927
Expected credit loss (gain)		-	(1,687)
Net loss on financial assets and liabilities at fair value through profit or loss		-	7
Interest expense		19,087	40,055
Interest income		(2,477)	(4,170)
Dividend income		(2,874)	(5,748)
Provision for inventory written down (reversal)		(5,337)	67,116
Losses on disposal of property, plant and equipment		910	1,895
Adjustment for other non-cash-related losses, net		(99)	8,494
Subtotal of gains or losses on non-cash activities		283,252	342,889
Changes in operating assets and liabilities:			
Notes receivable		(12,456)	23,865
Accounts receivable (including related parties)		(86,681)	164,158
Inventories		365,053	188,147
Other current assets		(368,163)	368,535
Notes payable		(26,450)	(42,615)
Accounts payable		1,409	67,770
Other current liabilities		31,416	29,052
Net defined benefit liability and asset		(1,335)	(2,068)
Total adjustments		186,045	1,139,733
Cash inflow generated from operations		392,479	1,367,776
Interest paid		(19,391)	(40,344)
Income taxes paid		(30,495)	(117,514)
Net cash from operating activities		342,593	1,209,918
Cash flows from investing activities:			
Acquisition of financial assets at fair value through other comprehensive income		(3,369)	-
Acquisition of property, plant and equipment		(483,741)	(371,797)
Proceeds from disposal of property, plant and equipment		1,286	2,382
Increase in other financial assets		(28,435)	(1,500)
Increase in other non-current assets		(34,337)	(29,709)
Interest received		2,477	4,170
Dividends received		2,874	5,748
Acquisition of non-controlling interests		(295)	(27,686)
Net cash used in investing activities		(543,540)	(418,392)
Cash flows from financing activities:			
Increase (decrease) in short-term borrowings		510,887	(377,469)
Increase (decrease) in short-term notes and bills payable		(150,000)	150,000
Proceeds from long-term borrowings		157,310	400,000
Repayments of long-term borrowings (including current portion)		(133,333)	(503,133)
Decrease in guarantee deposits received		-	(470)
Payment of lease liabilities		(5,285)	(5,015)
Cash dividends paid		(107,939)	(288,051)
Cash dividends paid for non-controlling interests		(23,252)	(36,618)
Increase in treasury stocks		(115,748)	-
Issuance of new shares for cash by subsidiaries		-	105,168
Net cash from (used in) financing activities		132,640	(555,588)
Effect of exchange rate changes on cash and cash equivalents		5,042	(2,954)
Net increase (decrease) in cash and cash equivalents		(63,265)	232,984
Cash and cash equivalents at beginning of period		767,193	534,209
Cash and cash equivalents at end of period	$	**703,928**	**767,193**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

COREMAX CORPORATION AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

(amounts expressed in Thousands of New Taiwan Dollars, except for per share information and unless otherwise noted)

1. Company history

Coremax Corporation (the "Company") was incorporated in Hsinchu, Republic of China (R.O.C.), on June 16, 1992. The registered address of the Company's office is 11 Wenhua Road, Hsinchu Industrial Park, Hsinchu County 30352, Taiwan R.O.C. The Company's ordinary shares were publicly listed on the Taiwan Stock Exchange on September 8, 2017 and the trading of Taipei Exchange stock was officially terminated on the same date.

The Company and subsidiaries (together referred to as the "Group") are mainly involved in the manufacturing, sales, import and export of oxidation catalyst, battery materials, chemical fertilizers and specialty chemicals.

2. Approval date and procedures of the consolidated financial statements

The consolidated financial statements were authorized for issue by the Board of Directors on February 26, 2021.

3. New standards, amendments and interpretations adopted:

(1) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. ("FSC") which have already been adopted.

The Group has initially adopted the following new amendments, which do not have a significant impact on its consolidated financial statements, from January 1, 2020:

- Amendments to IFRS 3 "Definition of a Business"
- Amendments to IFRS 9, IAS39 and IFRS7 "Interest Rate Benchmark Reform"
- Amendments to IAS 1 and IAS 8 "Definition of Material"
- Amendments to IFRS 16 "COVID-19-Related Rent Concessions"

(2) The impact of IFRS issued by the FSC but not yet effective

The Group assesses that the adoption of the following new amendments, effective for annual period beginning on January 1, 2021, would not have a significant impact on its consolidated financial statements:

- Amendments to IFRS 4 "Extension of the Temporary Exemption from Applying IFRS 9"
- Amendments to IFRS 9, IAS39, IFRS7, IFRS 4 and IFRS 16 "Interest Rate Benchmark Reform－Phase 2"

(3) The impact of IFRS issued by IASB but not yet endorsed by the FSC

The following new and amended standards, which may be relevant to the Group, have been issued by the International Accounting Standards Board (IASB), but have yet to be endorsed by the FSC:

Standards or Interpretations	Content of amendment	Effective date per IASB
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of balance sheet, debt and other liabilities with an uncertain settlement date should be classified as current (due or potentially due to be settled within one year) or non-current. The amendments include clarifying the classification requirements for debt a company might settle by converting it into equity.	January 1, 2023
Amendments to IAS 37 "Onerous Contracts－Cost of Fulfilling a Contract"	The amendments clarify that the ‘ costs of fulfilling a contract’ comprises the costs that relate directly to the contract as follows: ● direct labor; ● direct materials; ● an allocation of direct costs; ● The contract clearly determines the cost that can be charged to the trading object; ● Other costs arising from the signing of the agreement	January 1, 2022

The Group is evaluating the impact of its initial adoption of the abovementioned standards or interpretations on its consolidated financial position and consolidated financial performance. The results thereof will be disclosed when the Group completes its evaluation.

The Group does not expect the following other new and amended standards, which have yet to be endorsed by the FSC, to have a significant impact on its consolidated financial statements:

- Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture"
- IFRS 17 " Insurance Contracts" and amendments to IFRS 17 "Insurance Contracts"
- Amendments to IAS 16 "Property, Plant and Equipment－Proceeds before Intended Use"
- Annual Improvements to IFRS Standards 2018-2020
- Amendments to IFRS 3 "Reference to the Conceptual Framework"

4. Summary of significant accounting policies

The significant accounting policies presented in the consolidated financial statements are summarized as follows. Except for those described individually, the significant accounting policies have been applied consistently to all the periods presented in the consolidated financial statements.

(1) Statement of compliance

The consolidated financial statements have been prepared in accordance with the "Regulations Governing the Preparation of Financial Reports by Securities Issuers" (hereinafter referred to as the Regulations) and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations endorsed by the FSC (hereinafter referred to as the IFRSs endorsed by the FSC).

(2) Basis of preparation

(i) Basis of measurement

The consolidated financial statements have been prepared on a historical cost basis except for the following material items in the consolidated balance sheets:

1) Financial assets at fair value through profit or loss are measured at fair value (include derivative instruments);

2) Financial assets at fair value through other comprehensive income are measured at fair value;

3) The defined benefit liabilities (assets) are measured fair value of the plan assets less the present value of the defined benefit obligation, limited as explained in note 4(14).

(ii) Functional and presentation currency

The functional currency of each Group entity is determined based on the primary economic environment in which the entity operates. The consolidated financial statements are presented in New Taiwan Dollars (TWD), which is the Company's functional currency. Unless otherwise noted, all financial information presented in TWD has been rounded to the nearest thousand.

(3) Basis of consolidation

(i) Principle of preparation of the consolidated financial statements

The consolidated financial statements comprise the Company and subsidiaries. Subsidiaries are entities controlled by the Company. The Company 'controls' an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of the subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases. Losses attributable to the noncontrolling interests in a subsidiary are attributed to the noncontrolling interests even if doing so results in a deficit noncontrolling interests' balance.

The accounting policies in the subsidiary's financial statements has been adjusted properly to be consistent with the accounting policies used by the Group.

Changes in the Group's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received will be recognized directly in equity, and the Group will attributable it to the owners of the Company.

Intra group balances and transactions, and any unrealized income and expenses arising from intra group transactions are eliminated in preparing the consolidated financial statements.

(ii) List of subsidiaries in the consolidated financial statements

The consolidated entities were as follows:

			Percentage of Ownership (%)	
Name of Investor	**Name of Subsidiary**	**Business Nature**	**December 31, 2020**	**December 31, 2019**
The Company	Coremax (BVI) Corporation	Investment company	100 %	100 %
The Company	Uranus Chemicals Co., Ltd. (Uranus Chemicals)	Manufacturing and sales of oxalic acid、organic and inorganic acid、rare earth compounds and related products	62.65 %	62.62 %
The Company	Hengi Chemical Co., Ltd. (Hengi)	Manufacturing and sales of chemical fertilizers, chemical raw materials, organic fertilizer and fertilizers with organic matter. Import and export of related business. Recycling and reproduce of solvent and pollutants.	80.18 %	80.18 %
Coremax (BVI) Corporation	Coremax Zhuhai Chemical Co., Ltd.	Production and sales of oxidation catalysts, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbents and cobalt compound series products.	100 %	100 %
Coremax (BVI) Corporation	Coremax Ningbo Chemical Co., Ltd.	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	100 %	100 %
Coremax (BVI) Corporation	Coremax (Thailand) Co., Ltd.	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	100 %	100 %

Name of Investor	Name of Subsidiary	Business Nature	Percentage of Ownership (%) December 31, 2020	Percentage of Ownership (%) December 31, 2019
Coremax (BVI) Corporation	Coremax (Zhangzhou) Chemical Co., Ltd.	Manufacturing, processing and wholesale of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, waste gas absorbent and cobalt compound series products, and regeneration treatment of abort oxidation catalyst.	82.00 %	82.00 %
Uranus Chemicals Co., Ltd. (Uranus Chemicals)	Jiangxi Tianjiang Materials Co., Ltd.	Manufacturing and sales of oxalic acid、organic and inorganic acid、rare earth compounds and related products	100 %	100 %

The changing in the percentage of its ownership for subsidiaries, please refer to to Note 6(6).

(iii) List of subsidiaries which are not included in the consolidated financial statements: None.

(4) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated into the respective functional currencies of Group entities at the exchange rates at the dates of the transactions. At the end of each subsequent reporting period, monetary items denominated in foreign currencies are translated into the functional currencies using the exchange rate at that date.

Non-monetary items denominated in foreign currencies that are measured at fair value are translated into the functional currencies using the exchange rate at the date that the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Exchange differences are generally recognized in profit or loss, except for those differences relating to the following, which are recognized in other comprehensive income:

1) an investment in equity securities designated as at fair value through other comprehensive income;

2) a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; or

3) qualifying cash flow hedges to the extent that the hedges are effective.

(ii) Foreign operations

The assets and liabilities of foreign operations are translated into the presentation currency at the exchange rates at the reporting date. The income and expenses of foreign operations are translated into the presentation currency at the average exchange rate. Exchange differences are recognized in other comprehensive income.

(5) Classification of current and non-current assets and liabilities

The Group classifies an asset as current when any one of the following requirements is met. Assets that are not classified as current are non-current assets.

(i) It expects to realize the asset, or intends to sell or consume it, in its normal operating cycle;

(ii) It holds the asset primarily for the purpose of trading;

(iii) It expects to realize the asset within twelve months after the reporting date; or

(iv) The asset is cash or cash equivalent except for the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

The Group classifies a liability as current when any one of the following requirements is met. Liabilities that are not classified as current are non-current liabilities.

(i) It expects to settle the liability in its normal operating cycle;

(ii) It holds the liability primarily for the purpose of trading;

(iii) The liability is due to be settled within twelve months after the reporting date; or

(iv) The Group does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by issuing equity instruments do not affect its classification.

(6) Cash and cash equivalents

Cash comprises cash on hand, demand deposits and checking deposits. Cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits which meet the above definition and held for the purpose of meeting short-term cash commitments rather than for investment or other purposes are classified as cash equivalents.

(7) Financial instruments

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument. A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(i) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

On initial recognition, a financial asset is classified as measured at: amortized cost; Fair value through other comprehensive income (FVOCI) – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

1) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and

- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortized cost, which is the amount at which the financial asset is measured at initial recognition, plus/minus, the cumulative amortization using the effective interest method, adjusted for any loss allowance. Interest income, foreign exchange gains and losses, as well as impairment, are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

2) Fair value through other comprehensive income (FVOCI)

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an instrument-by-instrument basis.

Equity investments at FVOCI are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in other comprehensive income and are never reclassified to profit or loss.

Dividend income is recognized in profit or loss on the date on which the Group's right to receive payment is established.

3) Fair value through profit or loss (FVTPL)

All financial assets not classified as amortized cost or FVOCI described as above are measured at FVTPL, including derivative financial asset. On initial recognition, the Group may irrevocably designate a financial asset, which meets the requirements to be measured at amortized cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

4) Impairment of financial assets

The Group recognizes loss allowances for expected credit losses (ECL) on financial assets measured at amortized cost (including cash and cash equivalents, notes and accounts receivable, other receivable and other financial assets).

The Group measures loss allowances at an amount equal to lifetime ECL, except for the following which are measured as 12-month ECL:

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowance for trade receivables are always measured at an amount equal to lifetime ECL.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on the Group's historical experience and informed credit assessment as well as forward-looking information.

The Group considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of ' investment grade' " which is considered to be BBB- or higher per Standard & Poor's, Baa3 or higher per Moody's or twA or higher per Taiwan Ratings".

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 90 days past due.

The Group considers a financial asset to be in default when the financial asset is more than 180 days past due or the debtor is unlikely to pay its credit obligations to the Group in full.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

At each reporting date, the Group assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. For corporate customers, the Group individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

5) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognized in its statement of balance sheet, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognized.

(ii) Financial liabilities and equity instruments

1) Classification of debt or equity

Debt and equity instruments issued by the Company are classified as financial liabilities or equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

2) Equity instrument

An equity instrument is any contract that evidences residual interests in the assets of an entity after deducting all of its liabilities. Equity instruments issued are recognized as the amount of consideration received less the direct cost of issuing.

3) Compound financial instruments

Compound financial instruments issued by the Group comprise convertible bonds that can be converted to ordinary shares at the option of the holder, when the number of shares to be issued is fixed and does not vary with changes in fair value.

The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option. The equity component is recognized initially at the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest method. The equity component of a compound financial instrument is not remeasured.

Interest related to the financial liability is recognized in gain or loss. On conversion, the financial liability is reclassified to equity, and no gain or loss is recognized.

4) Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

5) Derecognition of financial liabilities

The Group derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

On derecognition of a financial liability, the difference between the carrying amount of a financial liability extinguished and the consideration paid is recognized in profit or loss.

6) Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount presented in the statement of balance sheet when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(iii) Derivative financial instruments

Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain criteria are met.

Derivatives are initially measured at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are generally recognized in profit or loss.

(8) Inventories

Inventories are measured at the lower of cost or net realizable value. The cost of inventories is based on the weighted-average method and includes expenditure and other costs incurred in bringing them to their existing location and condition. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(9) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost, which includes capitalized borrowing costs, less accumulated depreciation and any accumulated impairment losses.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as major components of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment is recognized in profit or loss.

(ii) Subsequent expenditure

Subsequent expenditure is capitalized only if it is probable that the future economic benefits associated with the expenditure will flow to the Group.

(iii) Depreciation

Depreciation is calculated on the cost of an asset less its residual value and is recognized in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment.

Land is not depreciated.

The estimated useful lives, for the current and comparative years, of significant items of property, plant and equipment are as follows:

1) Buildings: 4 to 60 years.

2) Machinery and equipment: 2 to 19 years.

3) Transportation Equipment: 4 to 7 years.

4) Other equipment: 3 to 11 years.

Buildings constitute mainly plant, buildings, mechanical and electrical power equipment, and related engineering, etc. Each constituent is depreciated based on its useful life, respectively.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(10) Leases

(i) Identifying a lease

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

– the contract involves the use of an identified asset – this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified; and

– the customer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

– the customer has the right to direct the use of the asset throughout the period of use only if either:

1) the customer has the right to direct how and for what purpose the asset is used throughout the period of use; or

2) the relevant decisions about how and for what purpose the asset is used are predetermined and:

   – the customer has the right to operate the asset throughout the period of use, without the supplier having the right to change those operating instructions; or

   – the customer designed the asset in a way that predetermines how and for what purpose it will be used throughout the period of use.

At inception or reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

(ii) As a leasee

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be reliably determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

– fixed payments, including in-substance fixed payments;

– variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;

– amounts expected to be payable under a residual value guarantee; and

– payments for purchase or termination options that are reasonably certain to be exercised.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when:

– there is a change in future lease payments arising from the change in an index or rate; or

– there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee; or

– there is a change in the lease term resulting from a change of its assessment on whether it will exercise an option to purchase the underlying asset, or

– there is a change of its assessment on whether it will exercise a extension or termination option; or

– there is any lease modifications

When the lease liability is remeasured, other than lease modifications, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or in profit and loss if the carrying amount of the right-of-use asset has been reduced to zero.

When the lease liability is remeasured to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease, the Group accounts for the remeasurement of the lease liability by decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognize in profit or loss any gain or loss relating to the partial or full termination of the lease.

The Group presents right-of-use assets that do not meet the definition of investment and lease liabilities as a separate line item respectively in the statement of financial position.

The Group has elected not to recognize right-of-use assets and lease liabilities for short-term leases and leases of low-value assets, including printer and staff dormitory. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

As a practical expedient, the Group elects not to assess whether all the rent concessions for all leased land occurring as a direct consequence of the COVID-19 pandemic are lease modifications or not.

In accordance with the practical expedient, the effect of the change in the lease liability is reflected in profit or loss in the period in which the event or condition that triggers the rent concession occurs.

(iii) As a lessor

When the Group acts as a lessor, it determines at lease commencement whether each lease is a finance lease or an operating lease. To classify each lease, the Group makes an overall assessment of whether the lease transfers to the lessee substantially all of the risks and rewards of ownership incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then the lease is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

(11) Intangible assets

(i) Recognition and measurement

Expenditure on research activities is recognized in profit or loss as incurred.

Development expenditure is capitalized only if the expenditure can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group intends to, and has sufficient resources to, complete development and to use or sell the asset. Otherwise, it is recognized in profit or loss as incurred. Subsequent to initial recognition, development expenditure is measured at cost, less accumulated amortization and any accumulated impairment losses.

(ii) Subsequent expenditure

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognized in profit or loss as incurred.

(12) Impairment of non-financial assets

At each reporting date, the Group reviews the carrying amounts of its non-financial assets (other than inventories and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or Cash Generating Units (CGUs).

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

For other non-financial assets (excluding goodwill), an impairment loss is reversed only to the extent that the asset' s carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(13) Revenue from contracts with customers

Revenue is measured based on the consideration to which the Group expects to be entitled in exchange for transferring goods or services to a customer. The Group recognizes revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer. The accounting policies for the Group's main types of revenue are explained below.

(i) Sale of goods

The Group researches, develops, produces, manufactures and sells various chemical catalyst products, cobalt compound products, oxalic acid products and electronic components, as well as batteries. The Group recognizes revenue when control of the products has transferred, being when the products are delivered to the customer, the customer has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the customer' s acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied.

A receivable is recognized when the goods are delivered as this is the point in time that the Group has a right to an amount of consideration that is unconditional.

(ii) Financing components

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(14) Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

(ii) Defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated separately for each the plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income, and accumulated in retained earnings. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset). Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) Short-term employee benefits

Short-term employee benefits obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

(15) Share based payment

The grant-date fair value of equity-settled share-based payment arrangements granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

(16) Income tax

Income taxes comprise current taxes and deferred taxes. Except for expenses related to business combinations or recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

Current taxes comprise the expected tax payables or receivables on the taxable profits (losses) for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payables or receivables are the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred taxes arise due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

Deferred taxes are measured at tax rates that are expected to be applied to temporary differences when they reserve, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if the following criteria are met:

(i) the Group has a legally enforceable right to set off current tax assets against current tax liabilities; and

(ii) the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:

1) the same taxable entity; or

2) different taxable entities which intend to settle current tax assets and liabilities on a net basis, or to realize the assets and liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax assets are recognized for the deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefits will be realized; such reductions are reversed when the probability of future taxable profits improves.

(17) Earnings per share

The Group discloses the Company's basic and diluted earnings per share attributable to ordinary shareholders of the Company. The calculation of basic earnings per share is based on the profit attributable to the ordinary shareholders of the Company divided by the weighted average number of ordinary shares outstanding. The calculation of diluted earnings per share is based on the profit attributable to ordinary shareholders of the Company, divided by the weighted average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares, such as convertible bonds payable and employee remuneration that could be distributed in share.

(18) Operating segment information

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the Group). Operating results of the operating segment are regularly reviewed by the Group's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance. Each operating segment consists of standalone financial information.

5. Significant accounting assumptions and judgments, and major sources of estimation uncertainty

The preparation of the consolidated financial statements in conformity with the Regulations and the IFRSs endorsed by the FSC requires management to make judgments, estimations and assumptions that affect the application of the accounting policies and the reported amount of assets, liabilities, income and expenses. Actual results may differ from these estimations.

Management continues to monitor the accounting estimations and assumptions. Management recognizes any changes in the accounting estimations during the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following:

(1) The loss allowance of notes and accounts receivables

The Group has estimated the loss allowance of notes and accounts receivable that is based on the risk of a default occurring and the rate of expected credit loss. The Group has considered historical experience, current economic conditions and forward-looking information at the reporting date to determine the assumptions to be used in calculating the impairments and the selected inputs. Please refer to note 6(4) for the impairment evaluation of receivables.

(2) Valuation of Inventories

Inventories are stated at the lower of cost or net realizable value, and the Group uses judgments and estimates to determine the net realizable value of inventory for obsolescence and unmarketable items at the reporting date. It also writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on the assumptions of the estimated demands of the products within a specific time horizon in the future, therefore, the above estimation may have a significant change. Please refer to note 6(5) for further description of the valuation of inventories.

Accounting policies and disclosures of the Group include the fair value measurement for financial or non-financial assets and liabilities. The Group determines the fair value using the independent data sources which reflect the current market condition and confirming the data available are independent, reliable, in consistent with other sources and represent the exercisable price. The Group also periodically assesses the evaluation model, performs retrospective tests, and updates inputs with any other necessary fair value adjustment for the evaluation model in order to ensure the reasonableness of the valuation.

The Group evaluates its assets and liabilities using the observable market inputs. The hierarchy of the fair value depends on the valuation techniques used, and the different levels have been defined as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs (other than quoted prices included within Level 1) that are observable for the assets or liabilities, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

Level 3: inputs for assets or liabilities that are not based on observable market data (unobservable inputs).

When there is a transfer between levels of the fair value hierarchy, the Group recognizes the transfer at the reporting date. For the assumptions used in fair value measurement, please refer to note 6(21) of the financial instruments.

6. Explanation of significant accounts

(1) Cash and cash equivalents

		December 31, 2020	December 31, 2019
Cash on hand	$	596	384
Demand deposits and checking accounts		700,268	564,757
Time deposits		3,064	202,052
	$	**703,928**	**767,193**

Please refer to note 6(21) for the disclosure of currency risk of the financial assets and liabilities.

(2) Financial assets measured at fair value through profit or loss

The Group uses derivative financial instruments in 2020 to hedge the price fluctuations risk of raw materials due to fluctuations in international nickel market. As of December 31, 2020, the futures trading of the Group has been settled and the outstanding futures contract margin amounting to$28,658 was recorded as non-current assets. The Group's net loss resulted from trading in this derivative financial instrument was $7,531; please refer to note 6(20).

(3) Financial assets at fair value through other comprehensive income－non-current

		December 31, 2020	December 31, 2019
Non-current:			
Domestic unlisted stocks	**$**	**49,203**	**49,297**

The purpose of these equity instruments is for long-term strategic investments and is not held for trading. As such, these instruments have been designated to be measured at fair value through other comprehensive income.

During the years of 2020 and 2019, the Group did not dispose any of its investment, thus, there were no transfer of accumulated profit and loss within the equity.

(4) Notes and accounts receivable, net

(i) Notes receivable, net:

	December 31, 2020	December 31, 2019
Notes receivable from operating activities	**$ 51,332**	**38,876**

(ii) Accounts receivable, net:

	December 31, 2020	December 31, 2019
Accounts receivable	$ 575,988	489,285
Less: loss allowance	(5,981)	(5,981)
	$ 570,007	**483,304**

The Group applies the simplified approach to provide for its loss allowance used for ECL, which permit the use of lifetime expected loss provision for all receivables. To measure the ECL, trade receivables have been grouped based on shared credit risk characteristics and the days past due, as well as incorporated forward looking information, including macroeconomic and relevant industry information. The loss allowance provision was determined as follows:

	December 31, 2020		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 609,819	0%	-
1 to 90 days past due	11,650	5%	-
91 to 180 days past due	-	20%	-
More than 181 days past due	-	100%	-
	$ 621,469		**-**

	December 31, 2019		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 522,332	0%	-
1 to 90 days past due	-	5%	-
91 to 180 days past due	-	20%	-
More than 181 days past due	-	100%	-
	$ 522,332		**-**

Note: As of December 31, 2020 and 2019, The accounts receivable both amounting for $5,981 respectively from Wintek Corporation have been fully provided with impairment losses.

Other receivables – related parties are not included in the above receivables, please refer to note 7 for details.

The movement in the loss allowance for notes and accounts receivable was as follows:

	2020	**2019**
Balance at beginning of period	$ 5,981	7,668
Impairment losses reversal	-	(1,687)
Balance at end of period	**$ 5,981**	**5,981**

(5) Inventories

	December 31, 2020	**December 31, 2019**
Raw materials	$ 455,208	627,666
Work in process	373,901	465,308
Finished goods	226,576	322,427
	$ 1,055,685	**1,415,401**

The components of operating costs were as follows:

	2020	**2019**
Cost of goods sold	$ 4,815,695	5,813,803
Inventory devaluation loss (reversal gain)	(5,337)	67,116
Gain from sale of scrap	(462)	(1,339)
	$ 4,809,896	**5,879,580**

As of December 31, 2020 and 2019, the Group's inventories were not pledged as collaterals.

(6) Changes in the Company's ownership interest in a subsidiary

(i) Acquisitions of Non-controlling interests (NCI)

In the third and fourth quarters of 2020, the Company acquired additional shares from those employees that resigned from Uranus Chemicals for $150 and $145 in cash, respectively, increasing its ownership from 62.62% to 62.65%.

In the third and fourth quarters of 2019, the Company acquired additional shares from those employees that resigned from Uranus Chemicals for $2,933 and $55 in cash, respectively, resulting change in its ownership. In addition, COREMAX(BVI) CORPORATION acquired additional shares in Coremax (Zhangzhou) Chemical Co., Ltd. for $24,698 in cash, increasing its ownership from 70.06% to 82% in September 2019.

The effects of the changes in shareholdings were as follows:

		2020	2019
Carrying amount of NCI on acquisition	$	395	19,215
Consideration paid to NCI		(295)	(27,686)
Capital surplus differences between consideration and carrying amounts of subsidiaries shareholding acquired	**$**	**100**	**(8,471)**

(ii) Issuance of new shares for cash by subsidiaries, not subscribed to proportionately, did not lose control.

In 2019, the Company did not purchase the new shares of Uranus Chemicals proportionately, resulting change in its ownership.

The effects of the changes in shareholdings were as follows:

		2019
The carrying amount of the subsidiary's net assets calculated based on the relative change in equity which should be transferred from NCI	$	(3,598)
Treasury shares	$	(18)
Equity transaction variance	**$**	**(3,616)**
Accounts adjusted for equity transaction variance		
Capital surplus-adjustment due to non-proportional investment in subsidiary's increase in capital	**$**	**13,025**
Retained earnings-adjustment due to non-proportional investment in subsidiary's increase in capital	**$**	**(16,641)**

(iii) Due to the above mentioned transactions, the Company's ownership of Uranus Chemicals was changed. As of December 31, 2020 and 2019, and January 1, 2019, its shareholding were 62.65%, 62.62%, and 62.7%, respectively.

(7) Material NCI of subsidiaries

The material NCI of subsidiaries were as follows:

Subsidiaries	Main operation place	Percentage of non-controlling interests December 31, 2020	December 31, 2019
Uranus Chemicals	Taiwan	37.35 %	37.38 %

The following information of the aforementioned subsidiaries have been prepared in accordance with the IFRSs endorsed by the FSC. Included in this information is the fair value adjustment made during the acquisition and relevant difference in accounting principles between the Group as at the acquisition date. Intragroup transactions were not eliminated in this information.

Uranus Chemicals' summarized financial information:

	December 31, 2020	December 31, 2019
Current assets	$ 166,312	298,786
Non-current assets	1,635,328	1,366,838
Current liabilities	(303,816)	(127,429)
Non-current liabilities	(373,093)	(324,497)
Net assets	**$ 1,124,731**	**1,213,698**
NCI	**$ 463,058**	**464,433**

	2020	2019
Sales revenue	**$ 228,424**	**219,311**
Net income	$ (69,567)	(26,629)
Other comprehensive income	600	(650)
Comprehensive income	**$ (68,967)**	**(27,279)**
Profit, attributable to NCI	**$ (17,551)**	**5,825**
Comprehensive income, attributable to NCI	**$ 219**	**(171)**
Net cash flows from operating activities	$ 59,270	42,004
Net cash flows used in investing activities	(304,050)	(116,283)
Net cash flows from financing activities	145,259	32,939
Net decrease in cash and cash equivalents	**$ (99,521)**	**(41,340)**
Pay to Uranus Chemicals' dividend	**$ 3,696**	**9,643**

(8) Property, plant and equipment

		Land	Building	Machinery and equipment	Transportation equipment	Other equipment	Prepaid Equipment and Construction in progress	Total
Cost:								
Balance at January 1, 2020	$	1,663,573	1,154,389	1,933,467	40,128	300,732	348,708	5,440,997
Additions		-	108,772	71,179	4,004	23,964	195,341	403,260
Disposals and scrap		-	(1,656)	(21,782)	(510)	(12,476)	-	(36,424)
Reclassification		-	121,920	155,530	(28)	11,104	(289,566)	(1,040)
Effect of exchange rate changes		(358)	1,117	(217)	(33)	102	257	868
Balance at December 31, 2020	$	**1,663,215**	**1,384,542**	**2,138,177**	**43,561**	**323,426**	**254,740**	**5,807,661**
Balance at January 1, 2019	$	1,663,199	1,050,455	1,873,199	31,985	296,244	104,427	5,019,509
Additions		-	85,192	80,424	7,286	21,160	261,886	455,948
Disposals and scrap		-	(11,486)	(33,132)	(1,698)	(21,606)	-	(67,922)
Reclassification		-	34,608	19,106	-	4,806	(16,917)	41,603
Effect of exchange rate changes		374	(4,380)	(6,130)	2,555	128	(688)	(8,141)
Balance at December 31, 2019	$	**1,663,573**	**1,154,389**	**1,933,467**	**40,128**	**300,732**	**348,708**	**5,440,997**
Accumulated depreciation and impairment losses:								
Balance at January 1, 2020	$	-	454,373	966,638	21,688	155,477	-	1,598,176
Depreciation for the period		-	90,796	148,677	4,954	23,285	-	267,712
Disposals and scrap		-	(1,656)	(20,925)	(510)	(11,137)	-	(34,228)
Effect of exchange rate changes		-	116	(1,250)	(77)	77	-	(1,134)
Balance at December 31, 2020	$	**-**	**543,629**	**1,093,140**	**26,055**	**167,702**	**-**	**1,830,526**
Balance at January 1, 2019	$	-	391,270	871,459	18,578	152,856	-	1,434,163
Depreciation for the period		-	76,276	129,222	3,909	21,420	-	230,827
Disposals and scrap		-	(11,465)	(30,814)	(2,310)	(19,056)	-	(63,645)
Effect of exchange rate changes		-	(1,708)	(3,229)	1,511	257	-	(3,169)
Balance at December 31, 2019	$	**-**	**454,373**	**966,638**	**21,688**	**155,477**	**-**	**1,598,176**
Carrying amounts:								
Balance at December 31, 2020	$	**1,663,215**	**840,913**	**1,045,037**	**17,506**	**155,724**	**254,740**	**3,977,135**
Balance at December 31, 2019	$	**1,663,573**	**700,016**	**966,829**	**18,440**	**145,255**	**348,708**	**3,842,821**
Balance at January 1, 2019	$	**1,663,199**	**659,185**	**1,001,740**	**13,407**	**143,388**	**104,427**	**3,585,346**

Hengi Chemical conducted asset revaluation in years 1975, 1981 and 2001, and provided a land value appreciation reserve of $207,483 (accounted for deferred income tax liabilities). Uranus Chemicals conducted an asset revaluation in 2007 and the Company conducted land revaluation when it obtained Uranus Chemicals control in November 2014, and provided a land value appreciation reserve of $70,856 (accounted for deferred income tax liabilities).

The property, plant and equipment of the Group pledged as collateral, please refer to note 8.

(9) Right-of-use assets

The Group leases many assets including land, buildings and transportation equipment. Information about leases for which the Group as a lessee was presented below:

		Land use right	Buildings	Transportation equipment and others	Total
Cost:					
Balance at January 1, 2020	$	37,724	1,066	16,599	55,389
Additions		-	-	3,729	3,729
Disposal/Write-off		-	-	(1,795)	(1,795)
Effect of exchange rate changes and others		386	-	-	386
Balance at December 31, 2020	$	**38,110**	**1,066**	**18,533**	**57,709**
Balance at January 1, 2019	$	-	-	-	-
Effects of retrospective application of IFRS 16		33,547	-	12,857	46,404
Additions		7,229	1,066	3,742	12,037
Effect of exchange rate changes and others		(3,052)	-	-	(3,052)
Balance at December 31, 2019	$	**37,724**	**1,066**	**16,599**	**55,389**
Accumulated depreciation and impairment losses:					
Balance at January 1, 2020	$	5,541	325	4,378	10,244
Depreciation for the year		1,291	325	4,714	6,330
Disposal/Write-off		-	-	(1,795)	(1,795)
Effect of exchange rate changes and others		60	-	-	60
Balance at December 31, 2020	$	**6,892**	**650**	**7,297**	**14,839**
Balance at January 1, 2019	$	-	-	-	-
Depreciation for the year		1,397	325	4,378	6,100
Effect of exchange rate changes and others		4,144	-	-	4,144
Balance at December 31, 2019	$	**5,541**	**325**	**4,378**	**10,244**

	Land use right	Buildings	Transportation equipment and others	Total
Carrying amount:				
Balance at December 31, 2020	$ **31,218**	**416**	**11,236**	**42,870**
Balance at December 31, 2019	$ **32,183**	**741**	**12,221**	**45,145**
Balance at January 1, 2019	$ **-**	**-**	**-**	**-**

(10) Short-term notes and bills payable

	December 31, 2020	December 31, 2019
Commercial paper payable	$ **80,000**	**230,000**

As of December 31, 2020 and 2019, the interest rate is 1.038% and 1.108%, respectively, and a maturity date of January 2021 and March 2020, respectively.

(11) Long-term/Short-term borrowings

(i) Short-term borrowings:

	December 31, 2020	December 31, 2019
Secured bank loans	$ 1,012,702	210,000
Unsecured bank loans	526,264	815,468
	$ **1,538,966**	**1,025,468**
Unused short-term credit lines	$ **2,309,162**	**2,695,046**
Range of interest rates	**0.76%~ 3.04%**	**1.07%~ 4.25%**

For the collateral for short-term borrowings, please refer to note 8.

Please refer to note 6(21) for the disclosure of interest risk, currency risk and liquidity risk.

(ii) Long-term borrowings:

Lender	Use	Maturity year and Repayment	December 31, 2020	December 31, 2019
Chang Hwa Commercial Bank	Long-term secured bank loans	Effective from May 2015, repayable quarterly in 20 equal instalments.	50,000	150,000
Chang Hwa Commercial Bank	Medium and long term working capital	Effective from August 2025, repayable monthly in 48 equal instalments.	80,000	-
Chang Hwa Commercial Bank	Plant and equipment	Effective from August 2025, repayable monthly in 48 equal instalments.	41,310	-
O-Bank	Working capital	From 2018 to 2033, first instalment is repayable 24 months after the first withdrawal date, with subsequent instalments in monthly basis, at a total of 157 equal instalments.	257,312	257,312
O-Bank	Working capital	From 2016 to 2020, with grace period of 24 month; first instalment is repayable upon the end of first grace period, and subsequent instalments are repayable quarterly, with a principal sum repayable in a total of 9 equal instalments.	-	33,333
O-Bank	Working capital	From 2019 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	150,000	150,000
Mega Bank	Working capital	From 2019 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	250,000	250,000
Mega Bank	Machinery and equipment	From 2020 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	36,000	-
Less: Current portion of long-term borrowings			(50,000)	(133,333)
			$ 814,622	**707,312**
Unused long-term credit lines			**917,690**	**559,355**
Range of interest rates at year end			**0.05%~ 1.50%**	**0.30%~ 1.50%**

The Company and Uranus Chemicals signed a loan agreement with O-Bank and agreed with the covenants related to maintaining certain financial ratios. As of December 31, 2020 and 2019, both the Company and Uranus Chemicals were in compliance with the loan covenants.

The collateral of long-term borrowings, please refer to note 8.

(12) Convertible bonds

The Company issued the second domestic guaranteed convertible bond on June 24, 2015, guaranteed by Chang Hwa Commercial Bank Co., Ltd., by pledging the ordinary shares of Hengi Chemical, with an amount of $200,416. In addition, the bond holder may request the Company to buy back the bond at par value, plus, interest compensation cost, with the date three years after the issuance of the bond. The relevant information of the Company's convertible corporate bonds is as follows:

	December 31, 2019
Total proceeds from convertible corporate bonds issued	$ 600,000
Less: Cumulative converted amount	(600,000)
Corporate bonds payable balance at year-end	**$ -**

	2019
Embedded derivative – call and put options revaluation gain (loss), included in valuation gain (loss) of financial assets and liabilities at FVTPL	**$ (7)**
Interest expense	**$ 15**

As of December 31, 2019, the second domestic guaranteed convertible bond has been fully converted.

The detail of the conversion to ordinary shares of Company's second guaranteed convertible corporate bonds in 2019, please refer to note 6(16).

(13) Lease liabilities

The Group's lease liabilities were as follow:

	December 31, 2020	**December 31, 2019**
Current	**$ 5,409**	**5,081**
Non-current	**$ 12,517**	**14,500**

For the maturity analysis, please refer to note 6(21).

The amounts recognized in profit or loss was as follows:

	2020	2019
Interest on lease liabilities	$ **289**	**268**
Expenses relating to short-term leases and leases of low-value assets	$ **820**	**1,472**
COVID-19-related rent concessions (recognized as other income)	$ **99**	**-**
Total cash outflow for leases	$ **6,295**	**6,755**

(i) Land and buildings leases

As of December 31, 2020, the Group leases land and buildings for a period of 4 to 45 years. Some leases include an option to renew the lease for an additional period of the same duration after the end of the contract term.

(ii) Other leases

The Group leases vehicles and others, with lease terms of 1 to 6 years. In some cases, the Group has options to purchase the assets at the end of the contract term.

The Group also leases printers and staff dormitory with contract terms of 1 to 2 years. These leases are short-term and leases of low-value items. The Group has elected not to recognize right-of-use assets and lease liabilities for these leases.

(14) Employee benefits

(i) Defined benefit plans

The present value of the defined benefit obligation and the fair value adjustments of the plan assets for the Company and domestic subsidiaries were as follow:

	December 31, 2020	December 31, 2019
Present value of the defined benefit obligation	$ 56,803	55,194
Fair value of plan assets	(63,560)	(61,746)
	$ **(6,757)**	**(6,552)**
Net defined benefit assets	$ **12,195**	**10,132**
Net defined benefit obligations	$ **5,438**	**3,580**

The Company and domestic subsidiaries established defined benefit plans by contributed to the pension fund account at Bank of Taiwan that provides pensions for employees upon retirement. The plans (covered by the Labor Standards Law) entitle a retired employee to receive an annual payment based on years of service and average salary for the six months prior to retirement.

1) Composition of plan assets

The Company and domestic subsidiaries allocate pension funds in accordance with the Regulations for Revenues, Expenditures, Safeguard and Utilization of the Labor Retirement Fund, and such funds are managed by the Bureau of Labor Fund, Ministry of Labor. Minimum earnings shall be no less than the earnings attainable from two-year time deposits with interest rates offered by local banks.

The Company and domestic subsidiaries' Bank of Taiwan labor pension reserve account balance amounting to $63,560 at December 31, 2020. For information on the utilization of the labor pension fund assets including the asset allocation and yield of the fund, please refer to the website of the Bureau of Labor Fund.

2) Movements in present value of defined benefit obligation

The movements in present value of the defined benefit obligation of the Company and domestic subsidiaries were as follows:

		2020	2019
Defined benefit obligation at January 1	$	55,194	60,483
Current service cost and interest		800	962
Benefits paid from plan assets		(2,318)	(7,885)
Remeasurements of the net defined benefit liabilities		3,127	1,634
Defined benefit obligation as of December 31	**$**	**56,803**	**55,194**

3) Movements in the fair value of the defined benefit plan assets

The movements in the fair value of the defined benefit plan assets of the Company and domestic subsidiaries were as follows:

		2020	2019
Fair value of plan assets at January 1	$	61,746	64,680
Contributions made		1,479	2,324
Interest income		656	706
Benefits paid from plan assets		(2,318)	(7,885)
Return on plan assets		1,997	1,921
Fair value of plan assets at December 31	**$**	**63,560**	**61,746**

4) Expenses recognized in profit or loss

The expenses recognized in profit or losses for the Company and domestic subsidiaries were as follows:

		2020	2019
Current service cost	$	281	337
Net interest on the net defined benefit liabilities		(137)	(81)
	$	**144**	**256**

5) Remeasurements of the net defined benefit liabilities recognized in other comprehensive income

The Company and domestic subsidiaries' remeasurements of the net defined benefit liabilities recognized as accumulated in other comprehensive income were as follows:

		2020	2019
Cumulative amount at January 1	$	(6,605)	(6,892)
Recognized in profit (losses) for the period		(1,130)	287
Cumulative amount as of December 31	**$**	**(7,735)**	**(6,605)**

6) Actuarial assumptions

The following are the Company and domestic subsidiaries' significant actuarial assumptions regarding the present value of the defined benefit obligation at the reporting date:

	December 31, 2020	December 31, 2019
Discount rate	0.75%~0.80%	1.0%
Future salary increase rate	1.5%~3.5%	1.5%~3.5%

The Company and domestic subsidiaries are expecting a contribution of $1,479 to its defined benefit plans in the following year, beginning December 31, 2020.

The weighted average duration of the defined benefit plan is 6.4~12.5 years.

7) Sensitivity analysis

The carrying amount of the Company and domestic subsidiaries' net defined benefit assets was $6,757 as of December 31, 2020. When the employee's unpaid salary growth rate is changed by 1%, it is estimated that the accrued pension liabilities recognized by the Company and domestic subsidiaries would increase by $3,202 or decrease by $2,886, respectively.

(ii) Defined contribution plans

In accordance with the provisions of the Labor Pension Act, the Company and domestic subsidiaries should contribute 6% of its employees' monthly wages to their labor pension personal accounts of the Bureau of Labor Insurance, Ministry of Labor (hereinafter referred to as the Bureau of Labor Insurance). Under this defined contribution plan, the Company and domestic subsidiaries contribute a fixed amount to the Bureau of Labor Insurance without additional legal or constructive obligations.

The total pension costs of the Group's overseas subsidiaries under their respective defined contribution plan are recognized in accordance with their local regulations.

The Group's pension costs under the defined contribution plan were $10,434 and $11,003 for the years ended December 31, 2020 and 2019, respectively.

(15) Income tax

(i) Income tax expense

The Company applied for capital increase and extended the five-year tax exemption case. The Economic and Industrial Bureau issued a certificate of completion of the emerging important strategic industries. The Company's self-manufactured chemical materials products revenue meet the above requirements from January 1, 2015 to December 31, 2019, the income tax for profit-making business is exempted.

The amount of income tax expense to the Group were as follows:

	2020	2019
Current tax expense		
Current period	$ 48,344	63,233
Undistributed earnings additional tax	-	7,062
Adjustment for prior periods	(9,763)	14,286
	38,581	84,581
Deferred tax expense		
Origination and reversal of temporary differences	2,208	(9,605)
Income tax expense	**$ 40,789**	**74,976**

The amount of income tax expense (benefits) recognized in other comprehensive income were as follows:

	2020	2019
Exchange differences on translation of foreign financial statements	**$ 1,087**	**(3,018)**

The reconciliation of income tax expenses and income before income tax were as follows:

	2020	2019
Income before income tax	$ 206,434	228,043
Income tax at the Company's domestic tax rate	41,287	45,609
Effect of different tax rates in foreign jurisdictions	2,051	887
Permanent difference	6,084	3,092
Undistributed earnings additional tax	133	7,062
Tax-exempt income	-	(4,056)
Change in provision in prior periods	(9,763)	15,051
Others	997	7,331
Total	**$ 40,789**	**74,976**

B. Recognized deferred tax assets and liabilities

Deferred tax assets	**January 1, 2019**	**Recognized in income statement**	**Recognized in other comprehensive income**	**December 31, 2019**	**Recognized in income statement**	**Recognized in other comprehensive income**	**December 31, 2020**
Exchange differences on translation of foreign financial statements	$ 3,115	-	(3,018)	6,133	-	1,087	5,046
Inventory devaluation loss	8,277	(13,422)	-	21,699	1,067	-	20,632
Pension not actually contributed	2,141	411	-	1,730	(4)	-	1,734
Impairment loss	8,856	270	-	8,586	170	-	8,416
Others	4,251	1,358	-	2,893	(8,874)	-	11,767
	$ 26,640	**(11,383)**	**(3,018)**	**41,041**	**(7,641)**	**(1,087)**	**47,595**

Deferred tax liabilities	**January 1, 2019**	**Recognized in income statement**	**Recognized in other comprehensive income**	**December 31, 2019**	**Recognized in income statement**	**Recognized in other comprehensive income**	**December 31, 2020**
Land Value Increment Tax	$ 278,339	-	-	278,339	-	-	278,339
Investment income recognized under equity method	16,082	2,570	-	18,652	9,226	-	27,878
Others	1,731	(792)	-	939	623	-	1,562
	$ 296,152	**1,778**	**-**	**297,930**	**9,849**	**-**	**307,779**

C. The Company's income tax returns for the years through 2018 were assessed by the tax authority.

(16) Capital and other equity

(i) Issuance and cancellation of ordinary shares

As of December 31, 2020 and 2019, the authorized capital of the Company both amounted to $1,200,000; the issued capital both amounted to $930,293. With par value at $10 per share.

Reconciliations of shares outstanding to the Company were as follows (in thousands of shares):

	Common Stock	
	2020	**2019**
Balance at January 1	93,029	92,845
Conversion of convertible bonds	-	184
Balance at December 31	**93,029**	**93,029**

As of December 31, 2019, the guaranteed convertible corporate bonds amounted to $4,500, were converted into 88 thousand shares, of the Company's ordinary shere capital. The net increase in capital surplus due to corporate bond conversion was $3,524.

For the year ended December 31, 2019, the statutory registration procedures for issuance of new shares due to the convertible bonds' holder exercised the rights were completed.

(ii) Capital surplus

	December 31, 2020	**December 31, 2019**
Additional paid-in capital	$ 1,244,383	1,244,383
Difference between consideration and carrying amount arising from acquisition or disposal of subsidiaries shareholdings	320,671	320,571
Other	38,199	34,503
	$ 1,603,253	**1,599,457**

According to the R.O.C. Company Act, capital surplus can only be used to offset a deficit, and only the realized capital surplus can be used to increase the ordinary share or be distributed as cash dividends. The aforementioned realized capital surplus includes capital surplus resulting from premium on issuance of capital share and earnings from donated assets received. According to the Regulations Governing the Offering and Issuance of Securities by Securities Issuers, capital increases by transferring capital surplus should not exceed 10% of the total ordinary share outstanding.

(iii) Retained earnings

1) Legal reserve

According to the R.O.C. Company Act, the Company must retain 10% of its after-tax annual earnings as legal reserve until such retention equals the amount of total capital. When a company incurs no loss, it may, pursuant to a resolution by a shareholders' meeting, distribute its legal reserve by issuing new shares or by distributing cash, and only the portion of legal reserve which exceeds 25% of capital may be distributed.

2) Special reserve

By choosing to apply exemptions granted under IFRS 1 during the Company's first-time adoption of the IFRSs endorsed by the FSC, cumulative translation adjustments under shareholders' equity shall be reclassified as retained earnings at the transition date. The increase in retained earnings occurring before the transition date due to the first-time adoption of the IFRSs endorsed by the FSC amounted to $20,277. The net increase in retained earnings resulting from the first application of IFRS1 on the transition date was $16,830. In accordance with Ruling No. 1010012865 issued by the FSC, a net increase in retained earnings due to the first-time adoption of the IFRSs endorsed by the FSC shall be reclassified as a special reserve during earnings distribution, and when the relevant asset is used, disposed of, or reclassified, this special reserve shall be reversed as distributable earnings proportionately.

In accordance with the guidelines of the above Ruling, a portion of current period earnings and undistributed prior period earnings shall be reclassified as a special reserve during earnings distribution. The amount to be reclassified should be equal to the difference between the total net current period reduction of special reserve resulting from the first-time adoption of the IFRSs endorsed by the FSC and the carrying amount of other shareholders' equity as stated above. Similarly, a portion of undistributed prior period earnings shall be reclassified as a special reserve (which does not qualify for earnings distribution) to account for cumulative changes to other shareholders' equity pertaining to prior periods due to the first-time adoption of the IFRSs endorsed by the FSC. Amounts of subsequent reversals pertaining to the net reduction of other shareholders' equity shall qualify for additional distributions. Pursuant to the shareholders' meeting held on June 12, 2020, a special reserve amounted to $2,930 was appropriated to cover the net reduction of other shareholders' equity.

3) Earnings distribution

According to the Company's articles of incorporation, in years of earnings, pay income tax, offset any accumulated deficit. Thereafter, a 10% appropriation of the remaining amount shall be set aside for legal reserve, unless the amount in the legal reserve is already equal to or greater than the total paid in capital. Thereafter, an amount shall be set aside or reversed as a special reserve in accordance with related laws, regulations, or provisions of the competent authorities. Distribution of the remaining earnings after setting aside the abovementioned amounts, together with the balance of the unappropriated retained earnings of the previous year, shall be proposed by the Board of Directors to be approved at the shareholders' meeting.

As the Company is still in its growth stage, capital is needed to expand its production lines and to increase its investment in the coming years. Recently, the Company has been developing steadily based on its capital expenditure, business expansion, and appropriate financial planning. The Company will allot more than 10% of its distributable earnings above as dividends to its shareholders. However, if the distributable earnings are less than 30% of the paid-in capital, then no dividend shall be distributed. If the Company simultaneously distributes stock dividends and cash dividends, the cash dividends should not be less than 20% of the total dividend payout to its shareholders.

The following are the appropriation of earnings in last two years which were proposed by the Board of Directors on February 26, 2021 and approved during the shareholders' meeting held on June 20, 2020, respectively:

	2020		2019	
	Amount per share (TWD)	**Total amount**	**Amount per share (TWD)**	**Total amount**
Dividends distributed to ordinary shareholders:				
Cash	**1.2**	**$ 121,205**	1.2267	111,635

The appropriation of retained earnings for 2019 is consistent with the resolutions proposed by the Board of Directors. The appropriation of earnings distribution for 2020 will be presented for resolution in annual shareholders' meeting. The related information will be available on the Market Observation Post System on the website after the meeting.

(iv) Treasury stock

In accordance with the requirements of Securities and Exchange Act, treasury shares held by the Company should not be pledged, and do not hold any shareholder rights before the transfer. Shares of the Company held by its subsidiaries are accounted for as treasury shares, which are not allowed in participating in the Company's capital increase and without voting rights, except that, other right is the same as the general shareholders' rights.

Uranus Chemicals holds 3,013 thousand ordinary shares of the Company, with the acquisition price of $22,434. As of December 31, 2020 and 2019, the amount of deemed treasury shares the Company recognized was $14,055 and $14,048, respectively, which was determined based on the Company's shareholding in Uranus Chemicals of 62.65% and 62.62%, respectively.

(vi) Other

Uranus Chemicals issued 10,000 thousand of new shares for cash in 2019, at a premium price of $27. NCI subscribed an amount of $105,168 in 2019.

(17) Earnings per share

	2020	2019
Basic earnings per share:		
Net income attributable to ordinary shareholders	$ **155,164**	**128,016**
Weighted-average number of ordinary shares outstanding during the year (in thousands of shares)	**89,771**	**91,126**
Basic earnings per share (TWD)	$ **1.73**	**1.40**
Diluted earnings per share:		
Net income attributable to ordinary shareholders of the Company	$ 155,164	128,016
Interest expense on convertible bonds, net of tax	-	12
	$ **155,164**	**128,028**
Weighted average number of ordinary shares outstanding (in thousands) (basic)	89,771	91,126
Effect of potential diluted ordinary shares:		
Effect of employee remuneration in share	159	120
Effect of conversion of convertible bonds	-	18
Weighted average number of ordinary shares outstanding (in thousands) (diluted)	**89,930**	**91,264**
Diluted earnings per share (TWD)	$ **1.73**	**1.40**

(18) Revenue from contracts with customers

Revenue from major markets region and products:

	2020					
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Total**
Taiwan	$ 426,058	2,587,291	775,903	685,567	203,734	4,678,553
China and other	476,527	-	-	1,041	129,244	606,812
	$ **902,585**	**2,587,291**	**775,903**	**686,608**	**332,978**	**5,285,365**

	2019					
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Total**
Taiwan	$ 499,556	3,302,869	683,665	648,850	462,270	5,597,210
China and other	504,139	-	-	-	268,171	772,310
	$ **1,003,695**	**3,302,869**	**683,665**	**648,850**	**730,441**	**6,369,520**

(19) Remuneration to employees, directors and supervisors

The Company's articles of incorporation require that earnings shall first be offset against any deficit, then, a minimum of 1.5% will be distributed as employee remuneration, and a maximum of 5% will be allocated as remuneration to directors and supervisors. Employees who are entitled to receive the above-mentioned employee remuneration, in share or cash, include the employees of the Company's subsidiaries who meet certain specific requirements.

For the years ended December 31, 2020 and 2019, the Company accrued and recognized its employee remuneration amounting to \$6,000 and \$8,000, respecitvely. These amounts were calculated by using the Company's pre-tax net profit for the period before deducting the amounts of the remuneration to employees, multiplied by the distribution of ratio of the remuneration to employees based on the Company's articles of incorporation, and expensed under operating costs or expenses. If there would be any changes after the reporting date, the changes shall be accounted for as changes in accounting estimates and recognized as profit or lost in the following year. If, however, the shareholders determine that the employee remuneration is to be distributed through share, the number of shares to be distributed shall be calculated using the stock price on the day before the shareholders' meeting.

For the year ended December 31, 2019, the remuneration to employees amounted to \$8,000. However, no remuneration to directors were distributed for the year then ended. There were no differences between the estimated and the actual amounts of employee and directors' remuneration. Related information would be available at the Market Observation Post System website.

(20) Non-operating income and expenses

(i) Other gains and losses, net

	2020	2019
Rental income	$ 10,497	14,220
Claim income	8,056	5,144
Dividend income	2,874	5,748
Other	11,078	4,989
	$ 32,505	**30,101**

(ii) Other gains and losses, net

	2020	2019
Loss on disposal of property, plant and equipment	$ (910)	(1,895)
Loss on valuation of financial assets and liabilities at FVTPL	(7,211)	(7)
Other	(3,757)	(4,287)
	$ (11,878)	**(6,189)**

(iii) Finance costs

		2020	2019
Interest expense – borrowings	$	18,798	39,772
Interest expense – convertible bonds payable		-	15
Interest expense – lease liabilities		289	268
	$	**19,087**	**40,055**

(iv) Interest income

		2020	2019
Interest income from bank deposits	**$**	**2,477**	**4,170**

(21) Financial instruments

(i) Credit risk

1) Credit risk exposure

The carrying amount of financial assets and contract assets represent the maximum credit exposure.

2) Concentration of credit risk

The customers of the Group are concentrated on customer base of oxidation catalyst, power battery materials, chemical fertilizers and special chemicals. The Group limits its exposure to credit risk from accounts receivables by continuously evaluates the debt collectability and provides adequate reserves for loss allowance, if necessary. As of December 31, 2020 and 2019, there were 7 and 8 major customers, which represented 37% and 36% of the accounts receivable, respectively. Thus, credit risk is significantly concentrated.

3) Credit risk of receivables and debt securities

For credit risk exposure of note and trade receivables, please refer to note 6(4). Other financial assets at amortized cost include other receivables from related parties and other financial assets. There are no impairment losses recognized for the years ended December 31, 2020 and 2019.

All of these financial assets are considered to have low risk, and thus, the loss allowance recognized during the period was limited to 12 months expected losses. Regarding how the financial instruments are considered to have low credit risk, please refer to note 4(7).

(ii) Liquidity risk

The following are the contractual maturities of financial liabilities, (including interest payments):

	Carrying amount	Contractual cash flow	Within 6 months	6 to 12 months	1 to 2 years	Above 2 years
December 31, 2020						
Non-derivative financial liabilities						
Short-term notes and bills payable	$ 80,000	80,000	80,000	-	-	-
Short-term borrowings	1,538,966	1,594,579	1,441,002	153,577	-	-
Notes and accounts payable	170,315	170,315	170,315	-	-	-
Payable on machinery and equipment	51,939	51,939	51,939	-	-	-
Long-term borrowing (including current portion of long-term borrowings)	864,622	774,982	52,535	2,262	4,517	715,668
Lease liabilities (including current and non-current)	17,926	18,894	3,030	2,615	3,740	9,509
	$ 2,723,768	**2,690,709**	**1,798,821**	**158,454**	**8,257**	**725,177**
December 31, 2019						
Non-derivative financial liabilities						
Short-term notes and bills payable	$ 230,000	230,000	230,000	-	-	-
Short-term borrowings	1,025,468	1,028,050	1,018,000	10,050	-	-
Notes and accounts payable	195,356	195,356	195,356	-	-	-
Payable on machinery and equipment	132,420	132,420	132,420	-	-	-
Long-term borrowing (including current portion of long-term borrowings)	840,645	884,894	76,040	64,400	55,459	688,995
Lease liabilities (including current and non-current)	19,581	20,653	2,934	2,410	4,206	11,103
	$ 2,443,470	**2,491,373**	**1,654,750**	**76,860**	**59,665**	**700,098**

The Group does not expect that the cash flows included in the maturity analysis could occur significantly earlier or at significantly different amounts.

(iii) Currency risk

1) Exposure to currency risk

The Group’ s financial assets and liabilities exposed to exchange rate risk were as follows:

	December 31, 2020		
	Foreign currency	**Exchange rate**	**TWD**
Financial Assets			
Monetary items			
USD	$ 30,535	28.48	869,628
Financial Liabilities			
Monetary items			
USD	21,322	28.48	607,261

	December 31, 2019		
	Foreign currency	**Exchange rate**	**TWD**
Financial Assets			
Monetary items			
USD	$ 19,468	29.98	583,637
Financial Liabilities			
Monetary items			
USD	6,785	29.98	203,403

2) Sensitivity analysis

The Group's exposure to foreign current risk arises from the translation of cash and cash equivalents, receivables, short-term borrowing, accounts payable, and other payables, that are denominated in USD. Assuming all other variable factors remain constant, a strengthening (weakening) of $1 of the TWD against USD as of December 31, 2020 and 2019, would have increased (decreased) the net income $7,370 and $10,146, respectively.

3) Exchange gains and losses of monetary items

Due to the variety of the functional currencies of the Group’ s entities, the Group’ s foreign exchange gains (losses) on monetary items amounted to $(13,885) and $(602) for the years ended December 31, 2020 and 2019, respectively.

(iv) Interest rate analysis

The Group’ s interest rate exposure regarding its financial assets and liabilities has been disclosed in the note of financial risk management.

The following sensitivity analysis is based on the exposure to interest rate risk of the derivative and non-derivative instruments on the reporting date. For variable rate instruments, the sensitivity analysis assumes the variable rate liabilities are outstanding for the whole year on the reporting date. The exposure to changes in interest rates (assuming all other variables remain constant) would have influenced the comprehensive income for the years ended December 31, 2020 and 2019, as illustrated below:

	Range of the fluctuations	**2020**	**2019**
Annual interest rate	Increase of 1%	$ (19,229)	(14,929)
	Decrease of 1%	$ 19,229	14,929

(vi) Fair value of financial instruments

1) Categories of financial instruments and fair value

The Company’ s carrying amount and fair value of financial assets and liabilities (including information on the fair value hierarchy, but excluding financial instruments whose fair values approximate their carrying amounts and lease liabilities) were as follows:

	December 31, 2020				
		Fair Value			
	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets at FVOCI	$ 49,203	-	-	49,203	49,203

	December 31, 2019				
		Fair Value			
	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets at FVOCI	$ 49,297	-	-	49,297	49,297

2) Valuation techniques for financial instruments not measured at fair value

The Group estimates the financial instruments not measured at fair value using the following methods and assumptions:

Fair value measurement for financial liabilities measured at amortized cost based on the latest quoted price and agreed upon price if these prices are available in active markets. When market value is unavailable, the fair value of financial liabilities is evaluated based on the discounted cash flow of the financial liabilities.

3) Valuation techniques for financial instruments that are measured at fair value

The right-of-call or put option that embedded in derivative is measured by using the appropriate option pricing models.

There is no transfer between the levels for the years ended December 31, 2020 and 2019.

4) Quantitative information on significant unobservable inputs (Level 3) used in fair value measurement

The Group's financial instruments that use Level 3 inputs to measure fair value include financial assets at FVOCI (equity instrument investments). Quantitative information of significant unobservable inputs was as follows:

Item	Valuation technique	Significant unobservable inputs	Inter-relationship between significant unobservable inputs and fair value measurement
Financial assets at FVOCI (equity instrument investments without an active market)	Market approach	· Net worth ratio multiplier (December 31, 2020 and December 31, 2019 was 1.22 and 1.22, respectively.) · Liquidity discount (December 31, 2020 and December 31, 2019 was both 20%)	· The higher the net worth ratio multiplier, the higher fair value. · The higher of liquidity discount, the lower fair value.

Item	Valuation technique	Significant unobservable inputs	Inter-relationship between significant unobservable inputs and fair value measurement
Financial assets at FVOCI (equity instrument investments without an active market)	Asset-based approach	· Net asset · Liquidity discount (December 31, 2020 was 30%)	· The higher the net asset ratio multiplier, the higher fair value. · The higher of liquidity discount, the lower fair value.

5) Reconciliation of Level 3 fair values

	Equity instrument investment at FVOCI
January 1, 2020	$ 49,297
Additions	3,369
Recognize through other comprehensive income	(3,463)
December 31, 2020	**$ 49,203**
January 1, 2019	$ 53,224
Recognize through other comprehensive income	(3,927)
December 31, 2019	**$ 49,297**

The above-mentioned total gains or loss included “unrealized gains and losses from equity instrument investments measured at FVOCI gains and losses”.

(22) Financial risk management

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and process for measuring and managing risk. Further quantitative disclosures are included throughout these consolidated financial statements.

(i) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework.

The Group’s risk management policies are established to identify and analyze the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group’s activities.

The financial management department provides services for each business, coordinating access to domestic and international financial markets operations, monitors and manages the financial risks associated with the operations of the Group by analyzing the internal risk report on risk based on the degree and extent of the risk. The risk including credit risk, liquidity risk and market risk. The market risk which including currency risk, interest rate risk, and other market price risk.

(ii) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group deposits its cash and cash equivalents with reputable banks, thus, the credit risk is low.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, the management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate. The Group limits its exposure to credit risk by establishing a dedicated team that is responsible for customer's credit assessment and approval, limit and monitoring procedures. This is to ensure that appropriate actions are taken for the recoverability of overdue receivables. In addition, the Group will review the recoverable amount of the receivables individually at each reporting date so that impairment losses are appropriately provided for those irrecoverable receivables.

The Group's policy is to provide financial guarantees only to wholly owned subsidiaries. There is no endorsement guarantee to entity other than subsidiary on December 31, 2020 and 2019.

(iii) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it always has sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages and maintains sufficient cash and cash equivalents so as to cope with its operations and mitigate the effects of fluctuations in cash flows. The Group's management supervises the banking facilities and ensures compliance with the terms of loan agreements.

(iv) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates, and equity prices, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

1) Currency risk

The Company is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Group's entities, primarily the USD.

Interest in borrowing is denominated with the same currency of borrowing principal. Generally, the denominated currency of borrowing is the same with the Group's cash flow generated from operation, primarily in TWD, but also USD. Under these circumstances, the natural economic hedge exists without using derivative instrument.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

2) Interest rate risk

The Group's short-term and long-term borrowings are carried in variable interest rates. Therefore, the fluctuation of market rate will make the effective interest rate of short-term and long-term borrowings changed accordingly which resulted fluctuation in future cash flows.

(23) Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios to support its business and maximize shareholder's value.

The Group's industry is volatile, capital and technology-intensive industries, and the Group's life cycle is in a stable growth stage of operation. The remaining dividend policy must be adopted at this stage with funds to retain the surplus in response to operational growth and investment needs. The cash dividend distributed by the shareholder bonus shall not be less than 20% of the total distribution.

The top management of the Group re-examines the capital structure every six months, and its review includes consideration of the cost of each category of capital and related risks. Based on the recommendations of the top management, the Group will balance its overall capital structure by paying dividends, issuing new shares, buying back shares and issuing new debts or repaying old debts.

As of December 31, 2020, the way in which the Group's capital management was managed has not changed.

The debt-to-equity ratio at the reporting date is as follows:

		December 31, 2020	**December 31, 2019**
Total liabilities	$	3,247,120	2,915,917
Less: cash and cash equivalents		(703,928)	(767,193)
Net debt	**$**	**2,543,192**	**2,148,724**
Total equity	**$**	**3,970,429**	**4,052,939**
Debt-to-equity ratio		**64.05%**	**53.02%**

(24) Financing activities not affecting current cash flow

Reconciliation of liabilities arising from financing activities were as follows:

	January 1, 2020	Cash flows	Non-cash changes: Additions	Non-cash changes: Interest expense	Non-cash changes: Foreign exchange movement and others	December 31, 2020
Short-term notes and bills payable	$ 230,000	(150,000)	-	-	-	80,000
Short-term borrowings	$ 1,025,468	510,887	-	-	2,611	1,538,966
Long-term borrowings (including current portion)	$ 840,645	23,977	-	-	-	864,622
Lease liabilities (including current and non-current)	$ 19,581	(5,574)	3,729	289	(99)	17,926

	January 1, 2019	Effects of retro-spective applica-tion	Cash flows	Non-cash changes: Additions	Non-cash changes: Interest expense	Non-cash changes: Foreign exchange movement and others	December 31, 2019
Short-term notes and bills payable	$ 80,000	-	150,000	-	-	-	230,000
Short-term borrowings	$ 1,403,035	-	(377,469)	-	-	(98)	1,025,468
Long-term borrowings (including current portion)	$ 943,778	-	(103,133)	-	-	-	840,645
Lease liabilities (including current and non-current)	$ -	12,857	(5,283)	11,739	268	-	19,581
Convertible bonds payable	$ 4,395	-	-	-	-	(4,395)	-

7. Related-party transactions

(1) Names and relationship with related parties

Name of related party	Relationship with the Company
ORGCHEM TECHNOLOGIES, INC.	The chairman of Hengi Chemical is the director of ORGCHEM.
ITOCHU CORPORATION	Director of the Company (Note)

Note: ITOCHU CORPORATION, who has transferred more than half of its holding interest in the Company during its term at the office as a director, had been discharged from its position on February 20, 2020.

(2) Significant related-party transactions

(i) Operating revenue

	2020	2019
Director of the Company	$ 1,440	4,821
Other related parties	741	636
	$ 2,181	**5,457**

The selling prices for sales to related parties and collection period were similar to those for unrelated customers.

As of December 31, 2020 and 2019, the Group's accounts receivable due from related parties as a result of sales amounted to $130 and $152, respectively.

(ii) Purchase

	2020	2019
Director of the Company	**$ -**	**6,957**

(iii) Rental income

	December 31, 2020	December 31, 2019
Other related parties	**$ 4,932**	**4,932**

(iv) Other

For the years 2020 and 2019, expenses of the Group incurred due to the service provided by related parties amounted to $80 and $960, respectively.

As of December 31, 2020 and 2019, other receivables from related parties as a result of certain amounts paid on behalf of related parties under normal courses of business, amounted to $22 and $14, respectively.

(3) Transactions with key management personnel

Key management personnel remuneration comprised:

	2020	2019
Short-term employee benefits	$ 19,673	20,936
Post-employment benefits	251	274
	$ 19,924	**21,210**

8. Pledged assets

Except for note 6(12), the carrying amount of the Group's pledged assets are as follows:

Assets	Purpose of pledge	December 31, 2020	December 31, 2019
Land	Long- and short-term borrowings and obtaining credit limit for short-term borrowings	$ 1,340,105	1,340,105
Buildings	Long- and short-term borrowings and obtaining credit limit for short-term borrowings	160,773	111,504
Machinery and Equipment	Long- and short-term borrowings	362,281	458,889
Time deposits (recorded in other financial assets－non-current)	Long-term borrowings	1,840	1,840
Time deposits (recorded in other financial assets－non-current)	Guarantee deposit of natural gas	1,500	1,500
		$ 1,866,499	**1,913,838**

9. Commitments and contingencies

Except for the note 6(11), the remaining statements were as follow:

(1) As of December 31, 2020 and 2019, the Group had acquired property, plant and equipment, with the remaining commitments of $228,600 and $144,794, respectively.

(2) As of December 31, 2020 and 2019, the outstanding letters of credit were USD435 and USD534, respectively. As of December 31, 2020 and 2019, the subsidiary, Coremax (BVI) Corporation, had applied for a borrowing facility with an amount of USD3,000 (equivalent to $85,440 and $89,940, respectively) from a bank, in which the Company holds the responsibility as its joint guarantor.

10. Losses Due to Major Disasters: None

11. Subsequent Events

(1) A resolution was approved during the Company's board of directors' meeting held on December 23, 2020 for a capital increase of $500,000, by issuing 10,000 thousand new shares by cash, at a par value and an issuance price of $10 and $50 per share, respectively, with the base date set on January 25, 2021.

(2) A resolution was approved during the board of directors' meeting of Hengi Chemica, the Company's subsidiary, held on November 5, 2020, for a capital increase of $350,000, by issuing 10,000 thousand new shares by cash, at a par value and an issuance price of $10 and $35 per share, respectively, with the base date set on February 1, 2021.

12. Other

A summary of employee benefits, depreciation, and amortization, by function, is as follows:

By function / By item	2020			2019		
	Classified as operating cost	Classified as operating expenses	Total	Classified as operating cost	Classified as operating expenses	Total
Employee benefits						
Salaries	185,840	97,800	283,640	187,262	91,929	279,191
Labor and health insurance	18,583	7,754	26,337	19,226	8,528	27,754
Pension	7,549	3,029	10,578	7,402	3,854	11,256
Others	11,520	4,994	16,514	11,858	4,951	16,809
Depreciation	253,046	20,996	274,042	215,812	21,115	236,927

13. Other disclosures

(a) Information on significant transactions:

The following is the information on significant transactions required by the "Regulations Governing the Preparation of Financial Reports by Securities Issuers" for the Group:

Coremax Corporation and subsidiaries
Notes to the Consolidated Financial Statements

(i) Loans to other parties:

Number	Name of lender	Name of borrower	Account name	Related party	Highest balance of financing to other parties during the period	Ending balance	Actual usage amount during the period	Range of interest rates during the period (Note 4)	Purposes of fund financing for the borrower	Transaction amount for business between two parties	Reasons for short-term financing	Allowance for bad deb	Collateral		Individual funding loan limits (Note 2)	Maximum limit of fund financing (Note 1)
													Item	Value		
1	Coremax (BVI) Corporation	Coremax Ningbo Chemical Co., Ltd.	Other receivables	Yes	24,200	22,784	-	4%	2	-	Operating demand	-	None	-	95,106	142,659
1	Coremax (BVI) Corporation	Coremax (Thailand) Co., Ltd.	Other receivables	Yes	24,200	22,784	22,784	4%	2	-	Operating demand	-	None	-	95,106	142,659
1	Coremax (BVI) Corporation	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	30,250	28,480	28,480	4%	2	-	Operating demand	-	None	-	95,106	142,659
2	Coremax Ningbo Chemical Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	17,516	17,508	-	4%	2	-	Operating demand	-	None	-	33,123	49,685
3	Coremax Zhuhai Chemical Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	13,317	13,131	-	4%	2	-	Operating demand	-	None	-	19,112	28,668
4	Jiangxi Tianjiang Materials Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	10,948	10,943	10,943	4%	2	-	Operating demand	-	None	-	13,589 (Note 3)	16,986 (Note 3)

Note1: Limit of total financing amount shall not exceed 30% of latest financial statements of the lender’s capital.
Note2: Limit of financing amount for individual counter-party shall not exceed 20% of the latest financial statements of the lender’s capital.
Note3: Limit of total financing amount shall not exceed 100% of latest financial statements of the lender’s capital. Limit of financing amount for individual counter-party shall not exceed 80% of the latest financial statements of the lender’s capital.
Note4: (1) Parties which have business relationship with the Company
(2) The need for short-term financing

(ii) Guarantees and endorsements for other parties:

No.	Name of guarantor	Counter-party of guarantee and endorsement		Limitation on amount of guarantees and endorsements for a specific enterprise (Note 2)	Highest balance for guarantees and endorsements during the period	Balance of guarantees and endorsements as of reporting date	Actual usage amount during the period	Property pledged for guarantees and endorsements (Amount)	Ratio of accumulated amounts of guarantees and endorsements to net worth of the latest financial statements	Maximum amount for guarantees and endorsements (Note 1)	Parent company endorsements / guarantees to third parties on behalf of subsidiary	Subsidiary endorsements / guarantees to third parties on behalf of parent company	Endorsements / guarantees to third parties on behalf of companies in Mainland China
		Name	Relationship with the Company										
0	The company	Coremax (BVI) Corporation	100% owned subsidiary of the parent company	650,638	90,750	85,440	51,264	-	2.63 %	1,626,596	Y	N	N

Note 1: The total amount for guarantees and endorsements provided by the Company to other entities shall not exceed 50% of latest financial statements of the Company's net worth audited.

Note 2: The total amount for guarantees and endorsements provided by the Company to any individual entity shall not exceed 20% of latest financial statements of the Company's net worth audited.

(iii) Securities held as of December 31, 2020 (excluding investment in subsidiaries, associates and joint ventures):

Name of holder	Category and name of security	Relationship with company	Account title	Shares (thousands)	Ending balance			Highest percentage of ownership (%)	Note
					Carrying value	Percentage of ownership	Fair value		
Hengi Chemical	ORGCHEM TECHNOLOGIES, INC.	The chairman of Hengi Chemical is the director of ORGCHEM.	Non-current financial assets at fair value through other comprehensive income	2,873	47,508	5.00 %	47,508	5.00 %	
Uranus Chemicals Co., Ltd.	HSINCHU GOLF COUNTRY CLUB Co.,Ltd	None	Non-current financial assets at fair value through other comprehensive income	3	3,369	- %	3,369	- %	

(iv) Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(v) Acquisition of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(vi) Disposal of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(vii) Related-party transactions for purchases and sales with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None.

(viii) Receivables from related parties with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None.

(ix) Trading in derivative instruments:None.

(x) Business relationships and significant intercompany transactions:

No.	Name of company	Name of counter-party	Nature of relationship	Intercompany transactions			
				Account name	Amount	Trading terms	Percentage of the consolidated net revenue or total assets
0	The Company	Coremax Ningbo Chemical Co., Ltd.	The parent company to the subsidiary.	Sales	63,561	100% T/T 150 days since arrival	1 %
0	The Company	Coremax (Zhangzhou) Chemical Co., Ltd.	The parent company to the subsidiary.	Sales	136,357	100% T/T 180 days since arrival	3 %
0	The Company	Coremax Zhuhai Chemical Co., Ltd.	The parent company to the subsidiary.	Sales	37,677	100% T/T 90 days since arrival	1 %
0	The Company	Coremax (Thailand) Co., Ltd.	The parent company to the subsidiary.	Sales	60,136	100% T/T 90 days since arrival	1 %

Coremax Corporation and subsidiaries
Notes to the Consolidated Financial Statements

(b) Information on investees:

The following is the information on investees of the Group for the year ended December 31,2020 (excluding information on investees in Mainland China):

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		Balance as of December 31, 2020			Highest percentage of ownership during the year (%)	Net income (losses) of investee	Share of profits/losses of investee	Note
				December 31, 2020	December 31, 2019	Shares (thousands)	Percentage of ownership	Carrying value				
The Company	Coremax (BVI) Corporation	British Virgin Islands	Investment company	302,406	302,406	9,658	100 %	475,529	100 %	37,444	37,444	Note
The Company	Hengi Chemical Co., Ltd.	Taiwan	Manufacturing and sales of chemical fertilizers, chemical raw materials, organic fertilizer and fertilizers with organic matter. Import and export of related business. Recycling and reproduce of solvent and pollutants.	823,294	823,294	31,913	80.18 %	1,215,080	80.18 %	136,912	109,195	Note
The Company	Uranus Chemicals Co., Ltd.	Taiwan	Manufacturing and sales of oxalic acid, organic and inorganic acid, rare earth compounds and related products	612,706	612,411	32,579	62.65 %	737,699	62.70 %	(69,567)	(32,561)	Note
Coremax (BVI) Corporation	Coremax (Thailand) Co., Ltd.	Thailand	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	67,047	67,047	70	100 %	55,067	100 %	6,023	6,023	Note

Note: The relevant transactions and ending balance are eliminated in consolidated financial statement.

(c) Information on investment in mainland China:

(i) The names of investees in Mainland China, the main businesses and products, and other information:

Name of investee	Main businesses and products	Total amount of paid-in capital	Method of investment	Accumulated outflow of investment from Taiwan as of January 1, 2019	Investment flows		Accumulated outflow of investment from Taiwan as of December 31, 2020	Net income (losses) of the investee	Percentage of ownership	Highest Percentage of ownership during the year	Investment income (losses) (Notes 3, 4)	Book value	Accumulated remittance of earnings in current period
					Outflow	Inflow							
Coremax Zhuhai Chemical Co., Ltd.	Production and sales of oxidation catalysts, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbents and cobalt compound series products.	38,775 (USD1,150)	Investment in companies in Mainland China through investment companies in the third regions.	38,775 (USD1,150)	-	-	38,775 (USD1,150)	(2,498)	100.00%	100%	(2,498) (USD85)	95,561	-
Coremax Ningbo Chemical Co., Ltd.	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	98,482 (USD3,000)	Investment in companies in Mainland China through investment companies in the third regions.(note 1)	81,240 (USD2,470)	-	-	81,240 (USD2,470)	2,290	100.00%	100%	2,290 (USD78)	165,615	-
Coremax (Zhangzhou) Chemical Co., Ltd.	Manufacturing, processing and wholesale of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, waste gas absorbent and cobalt compound series products, and regeneration treatment of abort oxidation catalyst.	185,654 (USD6,280)	Investment in companies in Mainland China through investment companies in the third regions.(note 2)	148,795	-	-	148,795 (USD4,988)	30,279	100.00%	100%	30,279 (USD1,025)	177,261	-
Jiangxi Tianjiang Materials Co., Ltd.	Manufacturing and sales of oxalic acid、organic and inorganic acid、rare earth compounds and related products	43,947 (USD1,350)	Uranus Chemical invest companies in Mainland China	43,947 (USD1,350)	-	-	43,947 (USD1,350)	(4,868)	100.00%	100%	(4,868)	16,986	-

(ii) Limitation on investment in Mainland China:

Cumulated Investment in Mainland China as of December 31, 2020	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment (Note 5)
312,757 (USD 9,958)	527,070 (USD 15,838)	1,951,915

Note 1: The paid up capital amount is NT $98,482 (USD 3,000), which included the cash remitted by the Company through its subsidiary, Coremax (BVI) Corporation amounting to NT $81,240 (USD 2,470) and surplus from Coremax (BVI) Corporation amounting to NT $17,242 (USD 530).

Note 2: The paid up capital amount is NT $185,654 (USD 6,280), which included the cash remitted by the Company through its subsidiary, Coremax (BVI) Corporation, amounting to NT $124,097 (USD 4,200), surplus from Coremax (BVI) Corporation amounting to NT $6,055 (USD 200), Coremax (BVI) Corporation acquired of shares from other external shareholders amounting to NT $24,698 (USD 788) in obtaining paid up capital of NT$ 21,890 (USD 750), cash remitted by Coremax Zhuhai Chemical Co., Ltd. is amounting to NT$ 20,720 (USD 700), and cash remitted by Coremax Ningbo Chemical Co., Ltd. Is amounting to NT $12,892 (USD430).

Note 3: Amount was recognized based on the audited financial statement.

Note 4: The relevant transactions and ending balance are eliminated in consolidated financial statement.

Note 5: The Company investment in Mainland China pursuant to "Principle of investment or Technical Cooperation in Mainland China" is not exceeding the investment amount or percentage limit.

(iii) Significant transactions:

The significant inter-company transactions with the subsidiaries in Mainland China, which were eliminated in the preparation of consolidated financial statements, are disclosed in “Information on significant transactions”.

14. Segment information

(1) General information and industrial information

The reportable segments are the Group's strategic divisions. They offer different products and services, and are managed separately because they require different technology and marketing strategies.

The Group did not allocate the head office management expenses, income tax expenses and non-recurring gains and losses to respective reportable segments. The amount presented is consistent with the report used by the chief operating decision maker. The accounting policies of the operating segments are consistent with the summary of the significant accounting policies described in note 4.

	2020						
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Reconciliation and elimination**	**Total**
External revenue	$ 902,585	2,587,291	775,903	686,608	332,978	-	5,285,365
Inter-segment revenue	44,431	3,587	-	37,399	306,904	(392,321)	-
Segment revenue	**$ 947,016**	**2,590,878**	**775,903**	**724,007**	**639,882**	**(392,321)**	**5,285,365**
Segment operating income							**$ 475,469**

	2019						
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Reconciliation and elimination**	**Total**
External revenue	$ 1,003,695	3,302,869	683,665	648,850	730,441	-	6,369,520
Inter-segment revenue	42,154	-	-	7,251	362,296	(411,701)	-
Segment revenue	**$ 1,045,849**	**3,302,869**	**683,665**	**656,101**	**1,092,737**	**(411,701)**	**6,369,520**
Segment operating income							**$ 489,940**

(2) Information by product and service

Revenue from external customers:

	2020	**2019**
Oxidation catalysts	$ 902,585	1,003,695
Battery materials	2,587,291	3,302,869
Chemical fertilizers	775,903	683,665
Specialty chemicals	686,608	648,850
Others	332,978	730,441
	$ 5,285,365	**6,369,520**

(3) Geographic information

In presenting information on the basis of geography, segment revenue is recognized based on the location of the customer and non-current assets are recognized based on the location of the asset.

A. Revenue from external customers:

Area		**2020**	**2019**
Taiwan	$	4,678,553	5,597,210
China and other		606,812	772,310
	$	**5,285,365**	**6,369,520**

B. Non-current assets (note):

Area		**December 31, 2020**	**December 31, 2019**
Taiwan	$	3,850,780	3,688,804
China and other		217,270	220,383
	$	**4,068,050**	**3,909,187**

Note: It includes property, plant and equipment, right-of-use assets, prepayment for purchase equipment and so on.

(4) Information on major customers:

For the years ended December 31, 2020 and 2019, the revenue generated from customers with 5% or more of the Group's revenue were $2,785,573 and $2,878,354, respectively.

Attachment 3

Parent Company-Only financial statements of the recent year, audited and certified by CPAs

Stock Code:4739

Coremax Corporation

Parent-Company-Only Financial Statements

With Independent Auditors' Report
For the Years Ended December 31, 2020 and 2019

The independent auditors' report and the accompanying parent-company-only financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and parent-company-only financial statements, the Chinese version shall prevail.

Table of contents

安侯建業聯合會計師事務所
KPMG
新竹市科學工業園區30078展業一路11號
No. 11, Prosperity Road I, Hsinchu Science Park,
Hsinchu, 30078, Taiwan, R.O.C.

Telephone 電話 + 886 (3) 579 9955
Fax 傳真 + 886 (3) 563 2277
Internet 網址 kpmg.com/tw

Independent Auditors' Report

To the Board of Directors
Coremax Corporation:

Opinion

We have audited the parent-company-only financial statements of Coremax Corporation ("the Company"), which comprise the balance sheets as of December 31, 2020 and 2019, and the statements of comprehensive income, changes in equity and cash flows for the years then ended and notes to the parent-company-only financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying parent-company-only financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Certification of Financial Statements by Certified Public Accountants and the auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Parent-company-only Financial Statements section of our report. We are independent of the Company in accordance with the Certified Public Accountants Code of Professional Ethics in Republic of China ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the parent-company-only financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the parent-company-only financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Based on our judgment, the key audit matters should be reflected in our report are as follow:

1. Loss allowance assessment of Receivables

   Please refer to Note 4(6) "Financial instruments" for the accounting policies of loss allowance assessment of receivables, Note 5 " for the relevant accounting estimation, and major sources of assumption uncertainty"; and Note 6(3) "Notes and accounts receivable, net" to the parent-company-only financial statements for the details of relevant disclosures.

KPMG

Description of key audit matters:

The Company has a worldwide customer base. As such, the Company may encounter difficulty in obtaining financial information of the customers due to the rapid changes in the business environment which included the industry, technology, market, and economic, as well as legal matters. When assessing the expected credit loss of its receivables during its lifetime, the receivables are measured based on the factors such as aging analysis of accounts receivable, customers' financial status, historical collection experience, current market conditions, and consideration of forward-looking information. The assessment of allowance for loss on accounts receivables involved subjective judgment of management, which has been identified as one of our key audit matters.

How the matter was addressed in our audit:

Our main audit procedures included: Obtaining and checking the accuracy of the impairment loss calculation from the management of the accounts receivable ; checking the completeness of the aging analysis of the receivables and accuracy of the aging bracket by sampling, and analyzing the receivables aging and historical receivables collection record and customer credit risk concentration in measuring the appropriateness of the expected credit loss rate in order to evaluate the reasonableness of the provision amount of the account receivable loss allowance of the Company, and evaluating the adequacy of the Company's disclosures in the accounts.

2. Valuation of Inventories

Please refer to Note 4(7) "Inventories" for the accounting policies of inventories valuation, Note 5 "for the relevant accounting estimation, and major sources of assumption uncertainty", and Note 6(4) "Inventories" to the parent-company-only financial statements for the details of relevant disclosures.

Description of key audit matters:

The Company's inventories are measured at the lower of cost and net realizable value. The Company will exercise judgment in estimating the net realizable value of its inventories as at reporting date. Estimation of net realizable value might subject to significant changes due to the fluctuations of the market and rapid changes in technology. Therefore, estimation of devaluation loss that reduce inventory to market value is one of our key audit matters.

How the matter was addressed in our audit:

Our principal audit procedures included: Understanding and evaluating the assessment performed by the management in calculating the net realizable value, as well as vouching to relevant documents for samples selected; evaluating the adequacy of the provisions policy ; assessing whether the valuation of inventories did follow such policy; and considering the adequacy of the Company's disclosures in the accounts.

Responsibilities of Management and Those Charged with Governance for the Parent-company-only Financial Statements

Management is responsible for the preparation and fair presentation of the parent-company-only financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and for such internal control as management determines is necessary to enable the preparation of parent-company-only financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the parent-company-only financial statements, management is responsible for assessing the Company'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 Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Parent-company-only Financial Statements

Our objectives are to obtain reasonable assurance about whether the parent-company-only financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China 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 parent-company-only financial statements.

As part of an audit in accordance with auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent-company-only 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 our 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.

2. 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 Company's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. 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 Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the parent-company-only financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the parent-company-only financial statements, including the disclosures, and whether the parent-company-only financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient and appropriate audit evidence regarding the financial information of the investment in other entities accounted for using the equity method to express an opinion on this parent-company-only financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We 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 we identify during our audit.

We also provide those charged with governance with a statement that we 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 our independence, and where applicable, related safeguards.

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

The engagement partners on the audit resulting in this independent auditors' report are Wan-Yuan Yu and Chi-Lung Yu.

KPMG

Taipei, Taiwan (Republic of China)
February 26, 2021

Notes to Readers

The accompanying parent-company-only financial statements are intended only to present the parent-company-only financial position, financial performance and cash flows in accordance with the accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such parent-company-only financial statements are those generally accepted and applied in the Republic of China.

The independent auditors' report and the accompanying parent-company-only financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and parent-company-only financial statements, the Chinese version shall prevail.

(English Translation of Parent-Company-Only Financial Statements Originally Issued in Chinese)

Coremax Corporation

Balance Sheets

December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars)

Assets	December 31, 2020 Amount	%	December 31, 2019 Amount	%
Current assets:				
Cash and cash equivalents (note 6(1))	$ 310,493	6	448,113	9
Notes receivable, net (note 6(3))	841	-	1,082	-
Accounts receivable, net (note 6(3))	266,856	5	153,827	3
Accounts receivable due from related parties (notes 6(3) and 7)	56,638	1	118,805	2
Other receivables due from related parties (note 7)	45,221	1	1,541	-
Inventories (note 6(4))	725,226	15	1,011,254	21
Prepayments to suppliers	507,522	10	148,318	3
Other current assets (note 6(7))	54,149	1	38,582	1
	1,966,946	39	1,921,522	39
Non-current assets:				
Investments accounted for using equity method (notes 6(5) and (6))	2,424,592	50	2,382,463	48
Property, plant and equipment (notes 6(8) and 8)	456,598	9	537,189	11
Right-of-use assets (notes 6(9) and 7)	55,785	1	33,195	1
Deferred tax assets (note 6(15))	17,988	-	26,708	1
Other non-current assets (notes 6(2) and (7))	39,082	1	6,833	-
	2,994,045	61	2,986,388	61
Total assets	**$ 4,960,991**	**100**	**4,907,910**	**100**

Liabilities and Equity	December 31, 2020 Amount	%	December 31, 2019 Amount	%
Current liabilities:				
Short-term notes and bills payable (note 6(10))	$ 80,000	2	230,000	4
Short-term borrowings (notes 6(11) and 8)	902,260	18	622,956	13
Notes payable	14,279	-	33,898	1
Accounts payable	95,930	2	102,831	2
Accounts payable to related parties (note 7)	15,507	-	11,275	-
Salary and bonds payable	35,754	-	36,260	1
Current lease liabilities (notes 6(13) and 7)	9,956	-	9,871	-
Long-term liabilities, current portion (notes 6(11) and (12))	-	-	33,333	1
Other current liabilities	29,563	1	59,390	1
	1,183,249	23	1,139,814	23
Non-current liabilities:				
Long-term borrowings (note 6(11))	436,000	9	400,000	8
Deferred tax liabilities (note 6(15))	29,254	-	19,439	-
Net defined benefit liability－non-current (note 6(14))	5,438	-	3,580	-
Deposits received (note 7)	524	-	-	-
Non－current lease liabilities (notes 6(13) and 7)	53,333	1	23,717	-
	524,549	10	446,736	8
Total liabilities	1,707,798	33	1,586,550	31
Equity (notes 6(5), (12) and (16)):				
Equity attributable to parent company shareholders:				
Ordinary share capital	930,293	19	930,293	19
Capital surplus	1,603,253	33	1,599,457	33
Retained earnings	868,001	17	825,786	17
Other equity interest	(18,558)	-	(20,128)	-
Treasury shares	(129,796)	(2)	(14,048)	-
	3,253,193	67	3,321,360	69
Total equity	3,253,193	67	3,321,360	69
Total liabilities and equity	**$ 4,960,991**	**100**	**4,907,910**	**100**

See accompanying notes to parent-company-only financial statements.

(English Translation of Parent-Company-Only Financial Statements Originally Issued in Chinese)

Coremax Corporation

Statements of Comprehensive Income

For the years ended December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars, except for earnings per share)

	2020		2019	
	Amount	%	Amount	%
Net operating revenue (notes 6(18) and 7)	$ 3,592,984	100	4,648,931	100
Operating costs (notes 6(4), (13), (14), (19) and 7)	3,416,089	95	4,439,735	96
Gross profit	176,895	5	209,196	4
Unrealized profit (loss) from sales (note 7)	(2,873)	-	5,590	-
Realized gross profit	174,022	5	214,786	4
Operating expenses (notes 6(13), (14), (19) and 7):				
Selling expenses	33,328	1	42,145	1
General administrative expenses	54,033	2	54,717	1
Research and development expenses	21,022	1	19,514	-
Total operating expenses	108,383	4	116,376	2
Net operating income	65,639	1	98,410	2
Non-operating income and expenses:				
Interest income (notes 6(20) and 7)	1,600	-	515	-
Other income (note 6(20))	12,552	-	7,937	-
Other gains and losses, net (note 6(20))	(7,195)	-	(337)	-
Finance costs (notes 6(20) and 7)	(9,379)	-	(23,584)	(1)
Foreign exchange gains (note 6(21))	(10,957)	-	(1,607)	-
Share of profit of subsidiaries accounted for using equity method (nots 6(5))	114,078	3	85,889	2
Total non-operating income and expenses	100,699	3	68,813	1
Income before income tax	166,338	4	167,223	3
Income tax expenses (note 6(15))	11,174	-	39,207	1
Net income	155,164	4	128,016	2
Other comprehensive income:				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurements of defined benefit plans (note 6(14))	(1,839)	-	(46)	-
Share of other comprehensive income of subsidiaries accounted for using equity method, components of other comprehensive income that will not be reclassified to profit or loss	(2,252)	-	(2,903)	-
Income tax related to items that will not be reclassified to profit or loss	-	-	-	-
Total items that will not be reclassified subsequently to profit or loss	(4,091)	-	(2,949)	-
Items that may be reclassified subsequently to profit or loss				
Exchange differences on translation of foreign financial statements	5,434	-	(15,088)	-
Income tax relating to item that may be reclassified subsequently (note 6(15))	1,087	-	(3,018)	-
Total items that may be reclassified subsequently to profit or loss	4,347	-	(12,070)	-
Other comprehensive income	256	-	(15,019)	-
Total comprehensive income	**$ 155,420**	**4**	**112,997**	**2**
Earnings per share (New Taiwan Dollars) (note 6(17)):				
Basic earnings per share	**$ 1.73**		**1.40**	
Diluted earnings per share	**$ 1.73**		**1.40**	

See accompanying notes to parent-company-only financial statements.

(English Translation of Parent-Company-Only Financial Statements Originally Issued in Chinese)
Coremax Corporation
Statements of Changes in Equity
For the years ended December 31, 2020 and 2019
(Expressed in Thousands of New Taiwan Dollars)

	Share capital				Retained earnings				Other equity interest				
	Ordinary share capital	Advance receipts for share capital	Total share capital	Capital surplus	Legal reserve	Special reserve	Retained earnings	Total	Exchange differences on translation of foreign financial statements	Unrealized gains (losses) on financial assets measured at fair value through other comprehensive income (Note)	Total other equity interest	Treasury shares	Total equity
Balance at January 1, 2019	$ 928,452	965	929,417	1,581,736	170,151	17,200	824,554	1,011,905	(5,688)	779	(4,909)	(14,066)	3,504,083
Net income for the period	-	-	-	-	-	-	128,016	128,016	-	-	-	-	128,016
Other comprehensive income (loss) for the period	-	-	-	-	-	-	200	200	(12,070)	(3,149)	(15,219)	-	(15,019)
Total comprehensive income (loss) for the period	-	-	-	-	-	-	128,216	128,216	(12,070)	(3,149)	(15,219)	-	112,997
Appropriation and distribution of retained earnings:													
Appropriated legal reserve	-	-	-	-	39,302	-	(39,302)	-	-	-	-	-	-
Cash dividends of ordinary share	-	-	-	-	-	-	(297,694)	(297,694)	-	-	-	-	(297,694)
Differences between consideration and carrying amounts of subsidiaries shareholding acquired or disposed of	-	-	-	(8,471)	-	-	-	-	-	-	-	-	(8,471)
Adjustment to capital surplus due to non-proportional investment in subsidiary's increase in capital	-	-	-	13,025	-	-	(16,641)	(16,641)	-	-	-	18	(3,598)
Adjustments of capital surplus for the Company's cash dividend distributed to subsidiaries	-	-	-	9,643	-	-	-	-	-	-	-	-	9,643
Conversion of convertible bonds	1,841	(965)	876	3,524	-	-	-	-	-	-	-	-	4,400
Balance at December 31, 2019	930,293	-	930,293	1,599,457	209,453	17,200	599,133	825,786	(17,758)	(2,370)	(20,128)	(14,048)	3,321,360
Net income for the period	-	-	-	-	-	-	155,164	155,164	-	-	-	-	155,164
Other comprehensive income (loss) for the period	-	-	-	-	-	-	(1,314)	(1,314)	4,347	(2,777)	1,570	-	256
Total comprehensive income	-	-	-	-	-	-	153,850	153,850	4,347	(2,777)	1,570	-	155,420
Appropriation and distribution of retained earnings:													
Appropriated legal reserve	-	-	-	-	12,802	-	(12,802)	-	-	-	-	-	-
Appropriated special reserve	-	-	-	-	-	2,930	(2,930)	-	-	-	-	-	-
Cash dividends of ordinary share	-	-	-	-	-	-	(111,635)	(111,635)	-	-	-	-	(111,635)
Differences between consideration and carrying amounts of subsidiaries shareholding acquired or disposed of	-	-	-	100	-	-	-	-	-	-	-	-	100
Treasury stock acquired	-	-	-	-	-	-	-	-	-	-	-	(115,748)	(115,748)
Adjustment to capital surplus due to the Company's cash dividend distributed to subsidiaries	-	-	-	3,696	-	-	-	-	-	-	-	-	3,696
Balance at December 31, 2020	**$ 930,293**	**-**	**930,293**	**1,603,253**	**222,255**	**20,130**	**625,616**	**868,001**	**(13,411)**	**(5,147)**	**(18,558)**	**(129,796)**	**3,253,193**

Note: Is the Company’s share of profit of subsidiaries accounted for using equity method.

See accompanying notes to parent-company-only financial statements.

(English Translation of Parent-Company-Only Financial Statements Originally Issued in Chinese)

Coremax Corporation

Statements of Cash Flows

For the years ended December 31, 2020 and 2019

(Expressed in Thousands of New Taiwan Dollars)

		2020	2019
Cash flows from operating activities:			
Income before income tax	$	166,338	167,223
Adjustments:			
Adjustments to reconcile profit :			
Depreciation		76,614	73,595
Net loss on financial assets and liabilities at fair value through profit or loss		-	7
Provision for inventory written down (reversal)		(36,000)	67,116
Interest expense		9,379	23,584
Interest income		(1,600)	(515)
Share of profit of subsidiaries accounted for using equity method		(114,078)	(85,889)
Gain on disposal of property, plant and equipment		(20)	(61)
Unrealized loss (gain) from inter-affiliate accounts sale		2,873	(5,590)
Adjustment for other non-cash-related losses, net		211	538
Subtotal of gains or losses on non-cash activities		(62,621)	72,785
Changes in operating assets and liabilities:			
Notes and accounts receivable (including related parties)		(50,621)	153,766
Inventories		322,028	145,202
Other current assets		(398,166)	360,253
Notes and accounts payable (including related parties)		(22,288)	84,342
Other current liabilities		(6,768)	(7,726)
Net defined benefit liability		19	(344)
Total adjustments		(218,417)	808,278
Cash inflow (outflow) generated from operations		(52,079)	975,501
Interest paid		(10,082)	(24,682)
Income taxes paid		(18,413)	(59,984)
Net cash from (used in) operating activities		(80,574)	890,835
Cash flows from investing activities:			
Acquisition of investments accounted for using equity method		-	(164,832)
Acquisition of non-controlling interests		(295)	(27,686)
Acquisition of property, plant and equipment		(35,459)	(59,844)
Proceeds from disposal of property, plant and equipment		41,428	402
Increase in other non-current assets		(34,368)	(3,398)
Interest received		1,600	515
Dividends received		76,349	125,690
Net cash from (used in) investing activities		49,255	(129,153)
Cash flows from financing activities:			
Increase (decrease) in short-term borrowings		273,993	(556,374)
Increase (decrease) in short-term notes and bills payable		(150,000)	150,000
Proceeds from long-term borrowings		36,000	400,000
Repayments of long-term borrowings (including current portion)		(33,333)	(194,445)
Payment of lease liabilities		(11,413)	(11,417)
Cash dividends paid		(111,635)	(297,694)
Increase in treasury stocks		(115,748)	-
Increase in guarantee deposits received		524	-
Net cash used in financing activities		(111,612)	(509,930)
Effect of exchange rate changes on cash and cash equivalents		5,311	1,225
Net increase (decrease) in cash and cash equivalents		(137,620)	252,977
Cash and cash equivalents at beginning of period		448,113	195,136
Cash and cash equivalents at end of period	$	**310,493**	**448,113**

See accompanying notes to parent-company-only financial statements.

(English Translation of Parent-Company-Only Financial Statements Originally Issued in Chinese)

COREMAX CORPORATION

Notes to the Parent-Company-Only Financial Statements

For the years ended December 31, 2020 and 2019

(amounts expressed in Thousands of New Taiwan Dollars,
except for per share information and unless otherwise noted)

1. Company history

Coremax Corporation (the "Company") was incorporated in Hsinchu, Republic of China (R.O.C.), on June 16, 1992. The registered address of the Company's office is 11 Wenhua Road, Hsinchu Industrial Park, Hsinchu County 30352, Taiwan R.O.C. The Company's ordinary shares were publicly listed on the Taiwan Stock Exchange on September 8, 2017 and the trading of Taipei Exchange stock was officially terminated on the same date.

The Company are mainly involved in the manufacturing, sales, import and export of oxidation catalyst, battery materials and specialty chemicals.

2. Approval date and procedures of the financial statements

The parent-company-only financial statements were authorized for issue by the Board of Directors on February 26, 2021.

3. New standards, amendments and interpretations adopted:

(1) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. ("FSC") which have already been adopted.

The Company has initially adopted the following new amendments, which do not have a significant impact on its parent-company-only financial statements, from January 1, 2020:

- Amendments to IFRS 3 "Definition of a Business"
- Amendments to IFRS 9, IAS39 and IFRS7 "Interest Rate Benchmark Reform"
- Amendments to IAS 1 and IAS 8 "Definition of Material"
- Amendments to IFRS 16 "COVID-19-Related Rent Concessions"

(2) The impact of IFRS issued by the FSC but not yet effective

The Company assesses that the adoption of the following new amendments, effective for annual period beginning on January 1, 2021, would not have a significant impact on its parent-company-only financial statements:

- Amendments to IFRS 4 "Extension of the Temporary Exemption from Applying IFRS 9"
- Amendments to IFRS 9, IAS39, IFRS7, IFRS 4 and IFRS 16 "Interest Rate Benchmark Reform－Phase 2"

(3) The impact of IFRS issued by IASB but not yet endorsed by the FSC

The following new and amended standards, which may be relevant to the Company, have been issued by the International Accounting Standards Board (IASB), but have yet to be endorsed by the FSC:

Standards or Interpretations	Content of amendment	Effective date per IASB
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of balance sheet, debt and other liabilities with an uncertain settlement date should be classified as current (due or potentially due to be settled within one year) or non-current. The amendments include clarifying the classification requirements for debt a company might settle by converting it into equity.	January 1, 2023
Amendments to IAS 37 "Onerous Contracts－Cost of Fulfilling a Contract"	The amendments clarify that the ' costs of fulfilling a contract' comprises the costs that relate directly to the contract as follows: ● direct labor; ● direct materials; ● an allocation of direct costs; ● The contract clearly determines the cost that can be charged to the trading object; ● Other costs arising from the signing of the agreement	January 1, 2022

The Company is evaluating the impact of its initial adoption of the abovementioned standards or interpretations on its financial position and financial performance. The results thereof will be disclosed when the Company completes its evaluation.

The Company does not expect the following other new and amended standards, which have yet to be endorsed by the FSC, to have a significant impact on its parent-company-only financial statements:

- Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture"
- IFRS 17 " Insurance Contracts" and amendments to IFRS 17 " Insurance Contracts"
- Amendments to IAS 16 "Property, Plant and Equipment－Proceeds before Intended Use"
- Annual Improvements to IFRS Standards 2018-2020
- Amendments to IFRS 3 "Reference to the Conceptual Framework"

4. Summary of significant accounting policies

The significant accounting policies presented in the parent-company-only financial statements are summarized as follows. Except for those described individually, the significant accounting policies have been applied consistently to all the periods presented in the parent-company-only financial statements.

(1) Statement of compliance

The parent-company-only financial statements have been prepared in accordance with the " Regulations Governing the Preparation of Financial Reports by Securities Issuers" (hereinafter referred to as the Regulations).

(2) Basis of preparation

(i) Basis of measurement

The parent-company-only financial statements have been prepared on a historical cost basis except for the following material items in the balance sheets:

1) Financial instruments at fair value through profit or loss are measured at fair value (include derivative instruments);

2) The defined benefit liabilities are measured fair value of the plan assets less the present value of the defined benefit obligation, limited as explained in note 4(14).

(ii) Functional and presentation currency

The functional currency of the Company is determined based on the primary economic environment in which the entity operates. The parent-company-only financial statements are presented in New Taiwan Dollars (TWD), which is the Company's functional currency. Unless otherwise noted, all financial information presented in TWD has been rounded to the nearest thousand.

(3) Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated into the functional currency of the Company at the exchange rates at the dates of the transactions. At the end of each subsequent reporting period, monetary items denominated in foreign currencies are translated into the functional currencies using the exchange rate at that date.

Non-monetary items denominated in foreign currencies that are measured at fair value are translated into the functional currencies using the exchange rate at the date that the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Exchange differences are generally recognized in profit or loss, except for those differences relating to the following, which are recognized in other comprehensive income:

1) an investment in equity securities designated as at fair value through other comprehensive income;

2) a financial liability designated as a hedge of the net investment in a foreign operation to the extent that the hedge is effective; or

3) qualifying cash flow hedges to the extent that the hedges are effective.

(ii) Foreign operations

The assets and liabilities of foreign operations are translated into the presentation currency at the exchange rates at the reporting date. The income and expenses of foreign operations are translated into the presentation currency at the average exchange rate. Exchange differences are recognized in other comprehensive income.

(4) Classification of current and non-current assets and liabilities

The Company classifies an asset as current when any one of the following requirements is met. Assets that are not classified as current are non-current assets.

(i) It expects to realize the asset, or intends to sell or consume it, in its normal operating cycle;

(ii) It holds the asset primarily for the purpose of trading;

(iii) It expects to realize the asset within twelve months after the reporting date; or

(iv) The asset is cash or cash equivalent except for the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

The Company classifies a liability as current when any one of the following requirements is met. Liabilities that are not classified as current are non-current liabilities.

(i) It expects to settle the liability in its normal operating cycle;

(ii) It holds the liability primarily for the purpose of trading;

(iii) The liability is due to be settled within twelve months after the reporting date; or

(iv) The Company does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by issuing equity instruments do not affect its classification.

(5) Cash and cash equivalents

Cash comprises cash on hand, demand deposits and checking deposits. Cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits which meet the above definition and held for the purpose of meeting short-term cash commitments rather than for investment or other purposes are classified as cash equivalents.

(6) Financial instruments

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Company becomes a party to the contractual provisions of the instrument. A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(i) Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

On initial recognition, a financial asset is classified as measured at: amortized cost; FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

1) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortized cost, which is the amount at which the financial asset is measured at initial recognition, plus/minus, the cumulative amortization using the effective interest method, adjusted for any loss allowance. Interest income, foreign exchange gains and losses, as well as impairment, are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

2) Fair value through profit or loss (FVTPL)

All financial assets not classified as amortized cost or FVOCI described as above are measured at FVTPL, including derivative financial asset. On initial recognition, the Company may irrevocably designate a financial asset, which meets the requirements to be measured at amortized cost or at FVOCI, as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

3) Impairment of financial assets

The Company recognizes loss allowances for expected credit losses (ECL) on financial assets measured at amortized cost (including cash and cash equivalents, notes and accounts receivable, other receivable).

The Company measures loss allowances at an amount equal to lifetime ECL, except for the following which are measured as 12-month ECL:

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowance for trade receivables are always measured at an amount equal to lifetime ECL.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on the Company's historical experience and informed credit assessment as well as forward-looking information.

The Company considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade' "which is considered to be BBB- or higher per Standard & Poor's, Baa3 or higher per Moody's or twA or higher per Taiwan Ratings".

The Company assumes that the credit risk on a financial asset has increased significantly if it is more than 90 days past due.

The Company considers a financial asset to be in default when the financial asset is more than 180 days past due or the debtor is unlikely to pay its credit obligations to the Company in full.

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Company in accordance with the contract and the cash flows that the Company expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

At each reporting date, the Company assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. For corporate customers, the Company individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

4) Derecognition of financial assets

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Company enters into transactions whereby it transfers assets recognized in its statement of balance sheet, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognized.

(ii) Financial liabilities and equity instruments

1) Classification of debt or equity

Debt and equity instruments issued by the Company are classified as financial liabilities or equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

2) Equity instrument

An equity instrument is any contract that evidences residual interests in the assets of an entity after deducting all of its liabilities. Equity instruments issued are recognized as the amount of consideration received less the direct cost of issuing.

3) Compound financial instruments

Compound financial instruments issued by the Company comprise convertible bonds that can be converted to ordinary shares at the option of the holder, when the number of shares to be issued is fixed and does not vary with changes in fair value.

The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option. The equity component is recognized initially at the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest method. The equity component of a compound financial instrument is not remeasured.

Interest related to the financial liability is recognized in gain or loss. On conversion, the financial liability is reclassified to equity, and no gain or loss is recognized.

4) Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

5) Derecognition of financial liabilities

The Company derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire. The Company also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value.

On derecognition of a financial liability, the difference between the carrying amount of a financial liability extinguished and the consideration paid is recognized in profit or loss.

6) Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount presented in the statement of balance sheet when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(iii) Derivative financial instruments

Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain criteria are met.

Derivatives are initially measured at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are generally recognized in profit or loss.

(7) Inventories

Inventories are measured at the lower of cost or net realizable value. The cost of inventories is based on the weighted-average method and includes expenditure and other costs incurred in bringing them to their existing location and condition. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(8) Investment in subsidiaries

The Company's subsidiaries are accounted for using the equity method when preparing its parent-company-only financial statements. Under the equity method, profit, other comprehensive income and equity in the parent-company-only financial statements are equivalent to the profit, other comprehensive income and equity which are contributed to the owners of the parent in the consolidated financial statements.

Changes in the Company's ownership interests in subsidiaries that do not result in a loss of control over the subsidiaries are accounted for as equity transactions.

(9) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost, which includes capitalized borrowing costs, less accumulated depreciation and any accumulated impairment losses.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as major components of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment is recognized in profit or loss.

(ii) Subsequent expenditure

Subsequent expenditure is capitalized only if it is probable that the future economic benefits associated with the expenditure will flow to the Company.

(iii) Depreciation

Depreciation is calculated on the cost of an asset less its residual value and is recognized in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment.

Land is not depreciated.

The estimated useful lives, for the current and comparative years, of significant items of property, plant and equipment are as follows:

1) Buildings: 4 to 60 years.

2) Machinery and equipment: 2 to 11 years.

3) Transportation Equipment: 4 to 7 years.

4) Other equipment: 3 to 11 years.

Buildings constitute mainly plant, buildings, mechanical and electrical power equipment, and related engineering, etc. Each constituent is depreciated based on its useful life, respectively.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(10) Leases

(i) Identifying a lease

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company assesses whether:

– the contract involves the use of an identified asset – this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified; and

– the customer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

– the customer has the right to direct the use of the asset only if either:

1) the customer has the right to direct how and for what purpose the asset is used throughout the period of use;

2) the relevant decisions about how and for what purpose the asset is used are predetermined and:

   – the customer has the right to operate the asset throughout the period of use, without the supplier having the right to change those operating instructions; or

   – the customer designed the asset in a way that predetermines how and for what purpose it will be used throughout the period of use.

At inception or reassessment of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Company has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

(ii) As a lessee

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be reliably determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

– fixed payments, including in-substance fixed payments;

– variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;

– amounts expected to be payable under a residual value guarantee; and

– payments for purchase or termination options that are reasonably certain to be exercised.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when:

– there is a change in future lease payments arising from the change in an index or rate; or

– there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee; or

– there is a change in the lease term resulting from a change of its assessment on whether it will exercise an option to purchase the underlying asset, or

– there is a change of its assessment on whether it will exercise an extension or termination option; or

– there is any lease modifications

When the lease liability is remeasured, other than lease modifications, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or in profit and loss if the carrying amount of the right-of-use asset has been reduced to zero.

When the lease liability is remeasured to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease, the Company accounts for the remeasurement of the lease liability by decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognize in profit or loss any gain or loss relating to the partial or full termination of the lease.

The Company presents right-of-use assets that do not meet the definition of investment and lease liabilities as a separate line item respectively in the statement of financial position.

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases and leases of low-value assets, including printer and staff dormitory. The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(iii) As a lessor

When the Company acts as a lessor, it determines at lease commencement whether each lease is a finance lease or an operating lease. To classify each lease, the Company makes an overall assessment of whether the lease transfers to the lessee substantially all of the risks and rewards of ownership incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then the lease is an operating lease. As part of this assessment, the Company considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Company is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease. If a head lease is a short-term lease to which the Company applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, the Company applies IFRS15 to allocate the consideration in the contract.

The Company recognizes a finance lease receivable at an amount equal to its net investment in the lease. Initial direct costs, such as lessors to negotiate and arrange a lease, are included in the measurement of the net investment. The interest income is recognized over the lease term based on a pattern reflecting a constant periodic rate of return on the net investment in the lease. The Company recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of ‘other income’.

(11) Intangible assets

(i) Recognition and measurement

Expenditure on research activities is recognized in profit or loss as incurred.

Development expenditure is capitalized only if the expenditure can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Company intends to, and has sufficient resources to, complete development and to use or sell the asset. Otherwise, it is recognized in profit or loss as incurred. Subsequent to initial recognition, development expenditure is measured at cost, less accumulated amortization and any accumulated impairment losses.

(ii) Subsequent expenditure

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognized in profit or loss as incurred.

(12) Impairment of non-financial assets

At each reporting date, the Company reviews the carrying amounts of its non-financial assets (other than inventories and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For impairment testing, assets are companied together into the smallest Company of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or Cash Generating Units (CGUs).

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

For other non-financial assets (excluding goodwill), an impairment loss is reversed only to the extent that the asset' s carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(13) Revenue from contracts with customers

Revenue is measured based on the consideration to which the Company expects to be entitled in exchange for transferring goods or services to a customer. The Company recognizes revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer. The accounting policies for the Company's main types of revenue are explained below.

(i) Sale of goods

The Company researches, develops, produces, manufactures and sells various chemical catalyst products, cobalt compound products and electronic components, as well as batteries. The Company recognizes revenue when control of the products has transferred, being when the products are delivered to the customer, the customer has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Company has objective evidence that all criteria for acceptance have been satisfied.

A receivable is recognized when the goods are delivered as this is the point in time that the Company has a right to an amount of consideration that is unconditional.

(ii) Financing components

The Company does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Company does not adjust any of the transaction prices for the time value of money.

(14) Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

(ii) Defined benefit plans

The Company's net obligation in respect of defined benefit plans is calculated separately for each the plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Company, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income, and accumulated in retained earnings. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset). Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iii) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

(15) Share based payment

The grant-date fair value of equity-settled share-based payment arrangements granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

(16) Income tax

Income taxes comprise current taxes and deferred taxes. Except for expenses related to business combinations or recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

Current taxes comprise the expected tax payables or receivables on the taxable profits (losses) for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payables or receivables are the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred taxes arise due to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

Deferred taxes are measured at tax rates that are expected to be applied to temporary differences when they reserve, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if the following criteria are met:

(i) the Company has a legally enforceable right to set off current tax assets against current tax liabilities; and

(ii) the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:

1) the same taxable entity; or

2) different taxable entities which intend to settle current tax assets and liabilities on a net basis, or to realize the assets and liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax assets are recognized for the deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefits will be realized; such reductions are reversed when the probability of future taxable profits improves.

(17) Earnings per share

The Company discloses the Company's basic and diluted earnings per share attributable to ordinary shareholders of the Company. The calculation of basic earnings per share is based on the profit attributable to the ordinary shareholders of the Company divided by the weighted average number of ordinary shares outstanding. The calculation of diluted earnings per share is based on the profit attributable to ordinary shareholders of the Company, divided by the weighted average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares, such as convertible bonds payable and employee remuneration that could be distributed in share.

(18) Operating segment information

The Company has disclosed operating segment information in consolidated financial statements.

Hence, this information is not required to be disclosed in these parent-company-only financial statements.

5. Significant accounting assumptions and judgments, and major sources of estimation uncertainty

The preparation of the parent-company-only financial statements in conformity with the Regulations and the IFRSs endorsed by the FSC requires management to make judgments, estimations and assumptions that affect the application of the accounting policies and the reported amount of assets, liabilities, income and expenses. Actual results may differ from these estimations.

Management continues to monitor the accounting estimations and assumptions. Management recognizes any changes in the accounting estimations during the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the parent-company-only financial statements is included in the following:

(1) The loss allowance of notes and accounts receivables

The Company has estimated the loss allowance of notes and accounts receivable that is based on the risk of a default occurring and the rate of expected credit loss. The Company has considered historical experience, current economic conditions and forward-looking information at the reporting date to determine the assumptions to be used in calculating the impairments and the selected inputs. Please refer to note 6(3) for the impairment evaluation of receivables.

(2) Valuation of Inventories

Inventories are stated at the lower of cost or net realizable value, and the Company uses judgments and estimates to determine the net realizable value of inventory for obsolescence and unmarketable items at the reporting date. It also writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on the assumptions of the estimated demands of the products within a specific time horizon in the future, therefore, the above estimation may have a significant change. Please refer to note 6(4) for further description of the valuation of inventories.

Accounting policies and disclosures of the Company include the fair value measurement for financial or non-financial assets and liabilities. The Company determines the fair value using the independent data sources which reflect the current market condition and confirming the data available are independent, reliable, in consistent with other sources and represent the exercisable price. The Company also periodically assesses the evaluation model, performs retrospective tests, and updates inputs with any other necessary fair value adjustment for the evaluation model in order to ensure the reasonableness of the valuation.

The Company evaluates its assets and liabilities using the observable market inputs. The hierarchy of the fair value depends on the valuation techniques used, and the different levels have been defined as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs (other than quoted prices included within Level 1) that are observable for the assets or liabilities, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

Level 3: inputs for assets or liabilities that are not based on observable market data (unobservable inputs).

When there is a transfer between levels of the fair value hierarchy, the Company recognizes the transfer at the reporting date. For the assumptions used in fair value measurement, please refer to note 6(22) of the financial instruments.

6. Explanation of significant accounts

(1) Cash and cash equivalents

	December 31, 2020	December 31, 2019
Cash on hand	$ 35	35
Demand deposits and checking accounts	310,458	298,178
Time deposits	-	149,900
	$ 310,493	**448,113**

Please refer to note 6(20) for the disclosure of currency risk of the financial assets and liabilities.

(2) Financial assets measured at fair value through profit or loss

The Company uses derivative financial instruments in 2020 to hedge the price fluctuations risk of raw materials due to fluctuations in international nickel market. As of December 31, 2020, the futures trading of the Company has been settled and the outstanding futures contract margin amounting to$28,658 was recorded as non current assets. please refer to note 6(7). The Company' s net loss from trading in these derivative financial instrument transactions in 2020 was $7,531, please refer to note 6(20).

(3) Notes and accounts receivable, net

(i) Notes receivable, net:

	December 31, 2020	December 31, 2019	January 1, 2019
Notes receivable from operating activities	**$ 841**	**1,082**	**48**

(ii) Accounts receivable, net:

	December 31, 2020	December 31, 2019	January 1, 2019
Accounts receivable	**$ 266,856**	**153,827**	**276,588**

The Company applies the simplified approach to provide for its loss allowance used for ECL, which permit the use of lifetime expected loss provision for all receivables. To measure the ECL, trade receivables have been companied based on shared credit risk characteristics and the days past due, as well as incorporated forward looking information, including macroeconomic and relevant industry information. The loss allowance provision was determined as follows:

	December 31, 2020		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 313,013	0%	-
1 to 90 days past due	11,322	5%	-
91 to 180 days past due	-	20%	-
More than 181 days past due	-	100%	-
	$ 324,335		**-**

	December 31, 2019		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 273,714	0%	-
1 to 90 days past due	-	5%	-
91 to 180 days past due	-	20%	-
More than 181 days past due	-	100%	-
	$ 273,714		**-**

Other receivables – related parties are not included in the above receivables, please refer to note 7 for details.

(4) Inventories

	December 31, 2020	**December 31, 2019**
Raw materials	$ 218,586	387,652
Work in process	308,101	376,451
Finished goods and commodities	198,539	247,151
	$ 725,226	**1,011,254**

The components of operating costs were as follows:

	2020	**2019**
Cost of goods sold	$ 3,452,302	4,373,506
Inventory devaluation loss (reversal gain)	(36,000)	67,116
Gain from sale of scrap	(213)	(887)
	$ 3,416,089	**4,439,735**

As of December 31, 2020 and 2019, the Company's inventories were not pledged as collaterals.

(5) Changes in the Company's ownership interest in a subsidiary

(i) Acquisitions of Non-controlling interests (NCI)

In the third and fourth quarters of 2020, the Company acquired additional shares from those employees that resigned from Uranus Chemicals for $150 and $145 in cash, respectively, increasing its ownership from 62.62% to 62.65%.

In the third and fourth quarters of 2019, the Company acquired additional shares from those employees that resigned from Uranus Chemicals for $2,933 and $55 in cash, respectively, resulting change in its ownership. In addition, COREMAX(BVI) CORPORATION acquired additional stocks in Coremax (Zhangzhou) Chemical Co., Ltd. for $24,698 in cash, increasing its ownership from 70.06% to 82% in September 2019.

The effects of the changes in shareholdings were as follows:

		2020	2019
Carrying amount of NCI on acquisition	$	395	19,215
Consideration paid to NCI		(295)	(27,686)
Capital surplus differences between consideration and carrying amounts of subsidiaries shareholding acquired	**$**	**100**	**(8,471)**

(ii) Issuance of new shares for cash by subsidiaries, not subscribed to proportionately, did not lose control.

In 2019, the Company did not purchase the new shares of Uranus Chemicals proportionately, resulting change in its ownership.

The effects of the changes in shareholdings were as follows:

		2019
The carrying amount of the subsidiary's net assets calculated based on the relative change in equity which should be transferred from NCI	$	(3,598)
Treasury shares	$	(18)
Accounts adjusted for equity transaction variance		
Capital surplus-adjustment due to non-proportional investment in subsidiary's increase in capital	**$**	**13,025**
Retained earnings-adjustment due to non-proportional investment in subsidiary's increase in capital	**$**	**(16,641)**

(iii) Due to the above-mentioned transactions, the Company's ownership of Uranus Chemicals was changed. As of December 31, 2020, and 2019, and January 1, 2019, its shareholding was 62.65%, 62.62%, and 62.7%, respectively.

(6) Investments accounted for using equity method

	December 31, 2020	December 31, 2019
Subsidiaries	$ 2,424,592	2,382,463

(i) Subsidiaries

Please refer to consolidated financial statements for the year ended December 31, 2020.

(ii) Share of profit of subsidiaries accounted for using equity method in 2020 and 2019 were as follows:

	2020	2019
Subsidiaries	$ 114,078	85,889

(iii) Information on major foreign currency equity investments on the reporting date were as follows:

	December 31, 2020			December 31, 2019		
	Foreign currency	Exchange rate	TWD	Foreign currency	Exchange rate	TWD
USD	$ 16,697	28.48	475,529	14,439	29.980	432,869

(7) Other current assets and other non-current assets

Other current assets:

	December 31, 2020	December 31, 2019
Tax receivables	$ 10,952	-
Refundable and overpaid business tax	28,336	27,011
Current lease receivable due from related parties	1,841	-
Others	13,020	11,571
	$ 54,149	38,582

Other non-current assets

	December 31, 2020	December 31, 2019
Futures contract margin	$ 28,658	-
Refundable deposits and others	4,248	5,318
Non-current lease receivable due from related parties	5,523	-
Prepaid equipment	653	1,515
	$ 39,082	6,833

(8) Property, plant and equipment

	Land	Building	Machinery and equipment	Transportation equipment	Other equipment	Prepaid Equipment and Construction in progress	Total
Cost:							
Balance at January 1, 2020	$ 130,864	239,451	464,714	18,293	114,823	18,789	986,934
Additions	-	1,888	10,102	2,300	5,459	5,191	24,940
Disposals and scrap	-	(1,656)	(117,649)	(860)	(19,503)	-	(139,668)
Reclassification	-	31	17,912	-	-	(16,428)	1,515
Balance at December 31, 2020	**$ 130,864**	**239,714**	**375,079**	**19,733**	**100,779**	**7,552**	**873,721**
Balance at January 1, 2019	$ 130,864	231,348	440,777	18,448	120,391	2,615	944,443
Additions	-	18,386	39,053	1,510	6,527	17,613	83,089
Disposals and scrap	-	(10,283)	(17,250)	(1,665)	(12,959)	-	(42,157)
Reclassification	-	-	2,134	-	864	(1,439)	1,559
Balance at December 31, 2019	**$ 130,864**	**239,451**	**464,714**	**18,293**	**114,823**	**18,789**	**986,934**
Accumulated depreciation and impairment losses:							
Balance at January 1, 2020	$ -	110,179	263,159	11,890	64,517	-	449,745
Depreciation for the period	-	15,123	39,928	2,118	8,469	-	65,638
Disposals and scrap	-	(1,656)	(79,996)	(843)	(15,765)	-	(98,260)
Balance at December 31, 2020	**$ -**	**123,646**	**223,091**	**13,165**	**57,221**	**-**	**417,123**
Balance at January 1, 2019	$ -	107,460	241,730	11,471	69,115	-	429,776
Depreciation for the period	-	13,002	38,452	1,971	8,360	-	61,785
Disposals and scrap	-	(10,283)	(17,023)	(1,552)	(12,958)	-	(41,816)
Balance at December 31, 2019	**$ -**	**110,179**	**263,159**	**11,890**	**64,517**	**-**	**449,745**
Carrying amounts:							
Balance at December 31, 2020	**$ 130,864**	**116,068**	**151,988**	**6,568**	**43,558**	**7,552**	**456,598**
Balance at December 31, 2019	**$ 130,864**	**129,272**	**201,555**	**6,403**	**50,306**	**18,789**	**537,189**
Balance at January 1, 2019	**$ 130,864**	**123,888**	**199,047**	**6,977**	**51,276**	**2,615**	**514,667**

The property, plant and equipment of the Company pledged as collateral, please refer to note 8.

(9) Right-of-use assets

The Company leases many assets including land, buildings and transportation equipment. Information about leases for which the Company as a lessee was presented below:

		Land use right	Buildings	Transportation equipment and others	Total
Cost:					
Balance at January 1, 2020	$	20,828	17,402	6,775	45,005
Additions		38,871	-	2,243	41,114
Disposal/Write off (Note)		(19,191)	-	(1,794)	(20,985)
Balance at December 31, 2020	$	**40,508**	**17,402**	**7,224**	**65,134**
Balance at January 1, 2019	$	-	-	-	-
Effects of retrospective application of IFRS 16		17,763	17,402	3,560	38,725
Additions		3,065	-	3,215	6,280
Balance at December 31, 2019	$	**20,828**	**17,402**	**6,775**	**45,005**
Accumulated depreciation and impairment losses:					
Balance at January 1, 2020	$	7,344	2,175	2,291	11,810
Depreciation for the year		6,174	2,175	2,627	10,976
Disposal/Write off (Note)		(11,643)	-	(1,794)	(13,437)
Balance at December 31, 2020	$	**1,875**	**4,350**	**3,124**	**9,349**
Balance at January 1, 2019	$	-	-	-	-
Depreciation for the year		7,344	2,175	2,291	11,810
Balance at December 31, 2019	$	**7,344**	**2,175**	**2,291**	**11,810**
Carrying amount:					
Balance at January 1, 2020	$	**13,484**	**15,227**	**4,484**	**33,195**
Balance at December 31, 2020	$	**38,633**	**13,052**	**4,100**	**55,785**
Balance at December 31, 2019	$	**13,484**	**15,227**	**4,484**	**33,195**

Note：For the write off right-of-assets book value $7,548 due to the sub-leases, please refer to note 7.

(10) Short-term notes and bills payable

		December 31, 2020	December 31, 2019
Commercial paper payable	$	**80,000**	**230,000**

As of December 31, 2020, and 2019, the interest rate is 1.038% and 1.108%, respectively, and a maturity date of January 2021 and March 2020, respectively.

(11) Long-term/Short-term borrowings

(i) Short-term borrowings:

	December 31, 2020	December 31, 2019
Secured bank loans	$ 552,260	-
Unsecured bank loans	350,000	622,956
	$ 902,260	**622,956**
Unused short-term credit lines	**$ 1,197,740**	**1,477,044**
Range of interest rates	**0.76%~ 1.09%**	**1.07%~ 2.60%**

Please refer to note 6(21) for the disclosure of interest risk, currency risk and liquidity risk.

(ii) Long-term borrowings:

Lender	Use	Maturity year and Repayment	December 31, 2020	December 31, 2019
O-Bank	Working capital	From 2016 to 2020, with grace period of 24 month; first instalment is repayable upon the end of first grace period, and subsequent instalments are repayable quarterly, with a principal sum repayable in a total of 9 equal instalments.	-	33,333
O-Bank	Working capital	From 2019 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	150,000	150,000
Mega Bank	Working capital	From 2019 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	250,000	250,000
Mega Bank	Loans for machinery and equipment	From 2020 to 2026, repayable monthly in 49 equal instalments beginning in 2022.	36,000	-
Less: Current portion of long-term borrowings			-	(33,333)
			$ 436,000	**400,000**
Unused long-term credit lines			**$ 93,000**	**66,667**
Range of interest rates at year end			**0.05%~ 0.13%**	**0.30%~ 1.37%**

The Company and Uranus Chemicals signed a loan agreement with O-Bank and agreed with the covenants related to maintaining certain financial ratios. As of December 31, 2020 and 2019, both the Company and Uranus Chemicals were in compliance with the loan covenants.

The collateral of long-term borrowings, please refer to note 8.

(12) Convertible bonds

The Company issued the second domestic guaranteed convertible bond on June 24, 2015, guaranteed by Chang Hwa Commercial Bank Co., Ltd., by pledging the ordinary shares of Hengi Chemical, with an amount of $200,416. In addition, the bond holder may request the Company to buy back the bond at par value, plus, interest compensation cost, with the date three years after the issuance of the bond. The relevant information of the Company's convertible corporate bonds is as follows:

	December 31, 2019
Total proceeds from convertible corporate bonds issued	$ 600,000
Less: Unamortized corporate bonds discount	-
Less: Cumulative converted amount	(600,000)
Corporate bonds payable balance at year-end	$ -
Embedded derivative – call and put options, included in financial assets at FVTPL	$ -

	2019
Embedded derivative – call and put options revaluation gain (loss), included in valuation gain (loss) of financial assets and liabilities at FVTPL	$ (7)
Interest expense	$ 15

As of December 31, 2019, the second domestic guaranteed convertible bond has been fully converted.

The detail of the conversion to ordinary shares of Company's second guaranteed convertible corporate bonds in 2019, please refer to note 6(17).

(13) Lease liabilities

The Company's lease liabilities were as follow:

	December 31, 2020	December 31, 2019
Current	$ 9,956	9,871
Non-current	$ 53,333	23,717

For the maturity analysis, please refer to note 6(21).

The amounts recognized in profit or loss was as follows:

	2020	2019
Interest on lease liabilities	$ **935**	**962**
Expenses relating to short-term leases and leases of low-value assets	$ **218**	**281**

The amounts recognized in the statement of cash flows for the Company was as follows:

	2020	2019
Total cash outflow for leases	$ **12,566**	**12,660**

(i) Land use right

As of December 31, 2020, the Company leases land for a period of 2 to 10 years. Some leases include an option to renew the lease for an additional period of the same duration after the end of the contract term.

(ii) Other leases

The Company leases vehicles and plants, with lease terms of 1 to 10 years. In some cases, the Company has options to purchase the assets at the end of the contract term.

The Company also leases printers and staff dormitory with contract terms of 1 to 2 years. These leases are short-term and leases of low-value items. The Company has elected not to recognize right-of-use assets and lease liabilities for these leases.

(14) Employee benefits

(i) Defined benefit plans

The present value of the defined benefit obligation and the fair value adjustments of the plan assets for the Company were as follow:

	December 31, 2020	December 31, 2019
Present value of the defined benefit obligation	$ 21,302	18,829
Fair value of plan assets	(15,864)	(15,249)
Net defined benefit liability	$ **5,438**	**3,580**

The Company established defined benefit plans by contributed to the pension fund account at Bank of Taiwan that provides pensions for employees upon retirement. The plans (covered by the Labor Standards Law) entitle a retired employee to receive an annual payment based on years of service and average salary for the six months prior to retirement.

1) Composition of plan assets

The Company allocate pension funds in accordance with the Regulations for Revenues, Expenditures, Safeguard and Utilization of the Labor Retirement Fund, and such funds are managed by the Bureau of Labor Fund, Ministry of Labor. Minimum earnings shall be no less than the earnings attainable from two-year time deposits with interest rates offered by local banks.

The Company Bank of Taiwan labor pension reserve account balance amounting to $15,864 at December 31, 2020. For information on the utilization of the labor pension fund assets including the asset allocation and yield of the fund, please refer to the website of the Bureau of Labor Fund.

2) Movements in present value of defined benefit obligation

The movements in present value of the defined benefit obligation of the Company were as follows:

	2020	2019
Defined benefit obligation at January 1	$ 18,829	18,086
Current service cost and interest	233	247
Remeasurements of the net defined benefit liabilities	2,240	496
Defined benefit obligation as of December 31	**$ 21,302**	**18,829**

3) Movements in the fair value of the defined benefit plan assets

The movements in the fair value of the defined benefit plan assets of the Company were as follows:

	2020	2019
Fair value of plan assets at January 1	$ 15,249	14,208
Contributions made	-	424
Interest income	214	167
Return on plan assets	401	450
Fair value of plan assets at December 31	**$ 15,864**	**15,249**

4) Expenses recognized in profit or loss

The expenses recognized in profit or losses for the Company were as follows:

	2020	2019
Current service cost	$ 44	44
Net interest on the net defined benefit liabilities	(25)	36
	$ 19	**80**

5) Remeasurements of the net defined benefit liabilities recognized in other comprehensive income

The Company's remeasurements of the net defined benefit liabilities recognized as accumulated in other comprehensive income were as follows:

		2020	2019
Cumulative amount at January 1	$	(2,996)	(2,950)
Recognized in profit (losses) for the period		(1,839)	(46)
Cumulative amount as of December 31	$	**(4,835)**	**(2,996)**

6) Actuarial assumptions

The following are the Company's significant actuarial assumptions regarding the present value of the defined benefit obligation at the reporting date:

	December 31, 2020	December 31, 2019
Discount rate	0.75%	1.00%
Future salary increase rate	3%	2.75%

The Company is expecting a contribution of $0 to its defined benefit plans in the following year, beginning December 31, 2020.

The weighted average duration of the defined benefit plan is 12.5 years.

7) Sensitivity analysis

The carrying amount of the Company's net defined benefit assets was $5,438 as of December 31, 2020. When the employee's unpaid salary growth rate is changed by 1%, it is estimated that the accrued pension liabilities recognized by the Company would increase by $1,828 or decrease by $1,639, respectively.

(ii) Defined contribution plans

In accordance with the provisions of the Labor Pension Act, the Company should contribute 6% of its employees' monthly wages to their labor pension personal accounts of the Bureau of Labor Insurance, Ministry of Labor (hereinafter referred to as the Bureau of Labor Insurance). Under this defined contribution plan, the Company contribute a fixed amount to the Bureau of Labor Insurance without additional legal or constructive obligations.

The Company's pension costs under the defined contribution plan were $4,413 and $4,565 for the years ended December 31, 2020 and 2019, respectively.

(15) Income tax

(i) Income tax expense

The Company applied for capital increase and extended the five-year tax exemption case. The Economic and Industrial Bureau issued a certificate of completion of the emerging important strategic industries. The Company's self-manufactured chemical materials products revenue meet the above requirements from January 1, 2015 to December 31, 2019, the income tax for profit-making business is exempted.

The amount of income tax expense to the Company were as follows:

	2020	2019
Current tax expense		
Current period	$ 489	32,374
Adjustment for prior periods	(6,763)	16,781
	(6,274)	49,155
Deferred tax expense		
Origination and reversal of temporary differences	17,448	(9,948)
	17,448	(9,948)
Income tax expense	**$ 11,174**	**39,207**

The amount of income tax expense recognized in other comprehensive income were as follows:

	2020	2019
Exchange differences on translation of foreign financial statements	**$ 1,087**	**(3,018)**

The reconciliation of income tax expenses and income before income tax were as follows:

	2020	2019
Income before income tax	$ 166,338	167,223
Income tax at the Company's domestic tax rate	33,267	33,445
Permanent difference	(13,979)	(14,608)
Tax-exempt income	-	(4,056)
Change in provision in prior periods	(6,763)	17,546
Undistributed earnings additional tax	43	-
Others	(1,394)	6,880
Total	**$ 11,174**	**39,207**

B. Recognized deferred tax assets and liabilities

Deferred tax assets		January 1, 2019	Recognized in income statement	Recognized in other comprehensive income	December 31, 2019	Recognized in income statement	Recognized in other comprehensive income	December 31, 2020
Exchange differences on translation of foreign financial statements	$	3,115	-	(3,018)	6,133	-	1,087	5,046
Inventory devaluation loss		2,640	(13,422)	-	16,062	7,200	-	8,862
Pension not actually contributed		774	68	-	706	(4)	-	710
Impairment loss		2,302	471	-	1,831	346	-	1,485
Others		1,837	(139)	-	1,976	91	-	1,885
	$	**10,668**	**(13,022)**	**(3,018)**	**26,708**	**7,633**	**(1,087)**	**17,988**

Deferred tax liabilities		January 1, 2019	Recognized in income statement	Recognized in other comprehensive income	December 31, 2019	Recognized in income statement	Recognized in other comprehensive income	December 31, 2020
Investment income recognized under equity method	$	16,082	2,570	-	18,652	9,226	-	27,878
Others		283	504	-	787	589	-	1,376
	$	**16,365**	**3,074**	**-**	**19,439**	**9,815**	**-**	**29,254**

C. The Company’s income tax returns for the years through 2018 were assessed by the tax authority.

(16) Capital and other equity

(i) Issuance and advance receipts of ordinary shares

As of December 31, 2020, and 2019, the authorized capital of the Company both amounted to $1,200,000; the issued capital both amounted to $930,293. With par value at $10 per share.

Reconciliations of shares outstanding to the Company were as follows (in thousands of shares):

	Common Stock	
	2020	**2019**
Balance at January 1	93,029	92,845
Conversion of convertible bonds	-	184
Balance at December 31	**93,029**	**93,029**

As of December 31, 2019, the guaranteed convertible corporate bonds amounted to $4,500, were converted into 88 thousand shares, of the Company's ordinary share capital. The net increase in capital surplus due to corporate bond conversion was $3,524.

For the year ended December 31, 2019, the statutory registration procedures for issuance of new shares due to the convertible bonds' holder exercised the rights were completed.

(ii) Capital surplus

		December 31, 2020	December 31, 2019
Additional paid-in capital	$	1,244,383	1,244,383
Difference between consideration and carrying amount arising from acquisition or disposal of subsidiaries shareholdings		320,671	320,571
Others		38,199	34,503
	$	**1,603,253**	**1,599,457**

According to the R.O.C. Company Act, capital surplus can only be used to offset a deficit, and only the realized capital surplus can be used to increase the ordinary share or be distributed as cash dividends. The aforementioned realized capital surplus includes capital surplus resulting from premium on issuance of capital share and earnings from donated assets received. According to the Regulations Governing the Offering and Issuance of Securities by Securities Issuers, capital increases by transferring capital surplus should not exceed 10% of the total ordinary share outstanding.

(iii) Retained earnings

1) Legal reserve

According to the R.O.C. Company Act, the Company must retain 10% of its after-tax annual earnings as legal reserve until such retention equals the amount of total capital. When a company incurs no loss, it may, pursuant to a resolution by a shareholders' meeting, distribute its legal reserve by issuing new shares or by distributing cash, and only the portion of legal reserve which exceeds 25% of capital may be distributed.

2) Special reserve

By choosing to apply exemptions granted under IFRS 1 during the Company's first-time adoption of the IFRSs endorsed by the FSC, cumulative translation adjustments under shareholders' equity shall be reclassified as retained earnings at the transition date. The increase in retained earnings occurring before the transition date due to the first-time adoption of the IFRSs endorsed by the FSC amounted to $20,277. The net increase in retained earnings resulting from the first application of IFRS1 on the transition date was $16,830. In accordance with Ruling No. 1010012865 issued by the FSC, a net increase in retained earnings due to the first-time adoption of the IFRSs endorsed by the FSC shall be reclassified as a special reserve during earnings distribution, and when the relevant asset is used, disposed of, or reclassified, this special reserve shall be reversed as distributable earnings proportionately.

In accordance with the guidelines of the above Ruling, a portion of current period earnings and undistributed prior period earnings shall be reclassified as a special reserve during earnings distribution. The amount to be reclassified should be equal to the difference between the total net current period reduction of special reserve resulting from the first-time adoption of the IFRSs endorsed by the FSC and the carrying amount of other shareholders' equity as stated above. Similarly, a portion of undistributed prior period earnings shall be reclassified as a special reserve (which does not qualify for earnings distribution) to account for cumulative changes to other shareholders' equity pertaining to prior periods due to the first-time adoption of the IFRSs endorsed by the FSC. Amounts of subsequent reversals pertaining to the net reduction of other shareholders' equity shall qualify for additional distributions. Pursuant to the shareholders' meeting held on June 12, 2020, a special reserve amounted to $2,930 was appropriated to cover the net reduction of other shareholders' equity.

3) Earnings distribution

According to the Company's articles of incorporation, in years of earnings, pay income tax, offset any accumulated deficit. Thereafter, a 10% appropriation of the remaining amount shall be set aside for legal reserve, unless the amount in the legal reserve is already equal to or greater than the total paid in capital. Thereafter, an amount shall be set aside or reversed as a special reserve in accordance with related laws, regulations, or provisions of the competent authorities. Distribution of the remaining earnings after setting aside the abovementioned amounts, together with the balance of the unappropriated retained earnings of the previous year, shall be proposed by the Board of Directors to be approved at the shareholders' meeting.

As the Company is still in its growth stage, capital is needed to expand its production lines and to increase its investment in the coming years. Recently, the Company has been developing steadily based on its capital expenditure, business expansion, and appropriate financial planning. The Company will allot more than 10% of its distributable earnings above as dividends to its shareholders. However, if the distributable earnings are less than 30% of the paid-in capital, then no dividend shall be distributed. If the Company simultaneously distributes stock dividends and cash dividends, the cash dividends should not be less than 20% of the total dividend payout to its shareholders.

The following are the appropriation of earnings in last two years which were proposed by the Board of Directors on February 26, 2021 and approved during the shareholders' meeting held on March 18, 2020, respectively:

	2020		2019	
	Amount per share (TWD)	**Total amount**	**Amount per share (TWD)**	**Total amount**
Dividends distributed to ordinary shareholders:				
Cash	**1.2**	**$ 121,205**	**1.2267**	**111,635**

The appropriation of retained earnings for 2019 is consistent with the resolutions proposed by the Board of Directors. The appropriation of earnings distribution for 2020 will be presented for resolution in annual shareholders' meeting. The related information will be available on the Market Observation Post System on the website after the meeting.

(iv) Treasury stock

In accordance with the requirements of Securities and Exchange Act, treasury shares held by the Company should not be pledged, and do not hold any shareholder rights before the transfer. Shares of the Company held by its subsidiaries are accounted for as treasury shares, which are not allowed in participating in the Company's capital increase and without voting rights, except that, other right is the same as the general shareholders' rights.

Uranus Chemicals holds 3,013 thousand ordinary shares of the Company, with the acquisition price of $22,434. As of December 31, 2020 and 2019, the amount of deemed treasury shares the Company recognized was $14,055 and $14,048, respectively, which was determined based on the Company's shareholding in Uranus Chemicals of 62.65% and 62.62%, respectively.

(17) Earnings per share

		2020	2019
Basic earnings per share:			
Net income attributable to ordinary shareholders of the Company	$	**155,164**	**128,016**
Weighted-average number of ordinary shares outstanding during the year (in thousands of shares)		**89,771**	**91,126**
Basic earnings per share (TWD)	$	**1.73**	**1.40**
Diluted earnings per share:			
Net income attributable to ordinary shareholders of the Company (basic)	$	155,164	128,016
Interest expense on convertible bonds, net of tax		-	12
Net income attributable to ordinary shareholders of the Company (diluted)	$	**155,164**	**128,028**
Weighted average number of ordinary shares outstanding (in thousands) (basic)		89,771	91,126
Effect of potential diluted ordinary shares:			
Effect of employee remuneration in share		159	120
Effect of conversion of convertible bonds		-	18
Weighted average number of ordinary shares outstanding (in thousands) (diluted)		**89,930**	**91,264**
Diluted earnings per share (TWD)	$	**1.73**	**1.40**

(18) Revenue from contracts with customers

Revenue from major markets region and products:

	2020					
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Total**
Taiwan	$ 448,376	2,587,298	-	180,967	376,343	3,592,984

	2019					
	Oxidation catalyst department	**Battery material department**	**Chemical fertilizer department**	**Specialty chemical department**	**Other**	**Total**
Taiwan	$ 530,213	3,302,869	-	133,038	682,811	4,648,931

(19) Remuneration to employees, directors and supervisors

The Company's articles of incorporation require that earnings shall first be offset against any deficit, then, a minimum of 1.5% will be distributed as employee remuneration, and a maximum of 5% will be allocated as remuneration to directors and supervisors. Employees who are entitled to receive the above-mentioned employee remuneration, in share or cash, include the employees of the Company's subsidiaries who meet certain specific requirements.

For the years ended December 31, 2020 and 2019, the Company accrued and recognized its employee remuneration amounting to $6,000 and $8,000 respectively. These amounts were calculated by using the Company's pre-tax net profit for the period before deducting the amounts of the remuneration to employees, multiplied by the distribution of ratio of the remuneration to employees based on the Company's articles of incorporation, and expensed under operating costs or expenses. If there would be any changes after the reporting date, the changes shall be accounted for as changes in accounting estimates and recognized as profit or lost in the following year. If, however, the shareholders determine that the employee remuneration is to be distributed through share, the number of shares to be distributed shall be calculated using the stock price on the day before the shareholders' meeting.

For the year ended December 31, 2019, the remuneration to employees amounted to $8,000. However, no remuneration to directors were distributed for the year then ended. There were no differences between the estimated and the actual amounts of employee and directors' remuneration. Related information would be available at the Market Observation Post System website.

(20) Non-operating income and expenses

(i) Other gains and losses, net

	2020	2019
Claim income	$ 8,056	5,144
Rental income	870	324
Others	3,626	2,469
	$ 12,552	7,937

(ii) Other gains and losses, net

		2020	2019
Loss on valuation of financial assets and liabilities at FVTPL	$	(7,211)	(7)
Gain on disposal of property, plant and equipment		20	61
Others		(4)	(391)
	$	(7,195)	(337)

(iii) Finance costs

		2020	2019
Interest expense – borrowings	$	8,444	22,607
Interest expense – convertible bonds payable		-	15
Interest expense – lease liabilities		935	962
	$	9,379	23,584

(iv) Interest income

		2020	2019
Interest income from bank deposits	$	1,600	515

(21) Financial instruments

(i) Credit risk

1) Credit risk exposure

The carrying amount of financial assets and contract assets represent the maximum credit exposure.

2) Concentration of credit risk

The customers of the Company are concentrated on customer base of oxidation catalyst, power battery materials, chemical fertilizers and special chemicals. The Company limits its exposure to credit risk from accounts receivables by continuously evaluates the debt collectability and provides adequate reserves for loss allowance, if necessary. As of December 31, 2020, and 2019, there were 3 and 2 major customers, which represented 33% and 36% of the accounts receivable, respectively. Thus, credit risk is significantly concentrated.

3) Credit risk of receivables and debt securities

For credit risk exposure of note and trade receivables, please refer to note 6(3). Other financial assets at amortized cost include other receivables from related parties and other financial assets. There are no impairment losses recognized for the years ended December 31, 2020 and 2019.

All of these financial assets are considered to have low risk, and thus, the loss allowance recognized during the period was limited to 12 months expected losses. Regarding how the financial instruments are considered to have low credit risk, please refer to note 4(6).

(ii) Liquidity risk

The following are the contractual maturities of financial liabilities, (including interest payments):

		Carrying amount	Contractual cash flow	Within 6 months	6 to 12 months	1 to 2 years	Above 2 years
December 31, 2020							
Non-derivative financial liabilities							
Short-term notes and bills payable	$	80,000	80,000	80,000	-	-	-
Short-term borrowings		902,260	904,480	904,480	-	-	-
Notes and accounts payable (including related parties)		125,716	125,716	125,716	-	-	-
Long-term borrowing (including current portion)		436,000	441,052	694	694	1,389	438,274
Lease liabilities (including current and non-current)		63,289	69,652	5,805	5,603	10,048	48,196
	$	**1,607,265**	**1,620,900**	**1,116,695**	**6,297**	**11,437**	**486,470**
December 31, 2019							
Non-derivative financial liabilities							
Short-term notes and bills payable	$	230,000	230,000	230,000	-	-	-
Short-term borrowings		622,956	624,881	624,881	-	-	-
Notes and accounts payable (including related parties)		148,004	148,004	148,004	-	-	-
Long-term borrowing (including current portion)		433,333	439,730	23,099	11,835	1,370	403,426
Lease liabilities (including current and non-current)		33,588	35,788	6,278	4,295	5,939	19,276
	$	**1,467,881**	**1,478,403**	**1,032,262**	**16,130**	**7,309**	**422,702**

The Company does not expect that the cash flows included in the maturity analysis could occur significantly earlier or at significantly different amounts.

(iii) Currency risk

1) Exposure to currency risk

The Company' s financial assets and liabilities exposed to exchange rate risk were as follows:

	December 31, 2020			
		Foreign currency	**Exchange rate**	**TWD**
Financial Assets				
Monetary items				
USD	$	29,365	28.48	836,323

	December 31, 2020		
	Foreign currency	**Exchange rate**	**TWD**
Financial Liabilities			
Monetary items			
USD	21,311	28.48	606,926

	December 31, 2019		
	Foreign currency	**Exchange rate**	**TWD**
Financial Assets			
Monetary items			
USD	$ 21,364	29.98	640,485
Financial Liabilities			
Monetary items			
USD	6,809	29.98	204,149

2) Sensitivity analysis

The Company's exposure to foreign current risk arises from the translation of cash and cash equivalents, receivables, short-term borrowing, accounts payable, and other payables, that are primarily denominated in USD. Assuming all other variable factors remain constant, a strengthening (weakening) of $1 of the TWD against USD as of December 31, 2020 and 2019, would have increased (decreased) the net income $6,443 and $11,644, respectively for the years then ended.

3) Exchange gains and losses of monetary items

	2020		**2019**	
	Foreign exchange gains (losses)	**Average rate**	**Foreign exchange gains (losses)**	**Average rate**
TWD	$ (10,957)	-	(1,607)	-

(iv) Interest rate analysis

The Company's interest rate exposure regarding its financial assets and liabilities has been disclosed in the note of financial risk management.

The following sensitivity analysis is based on the exposure to interest rate risk of the derivative and non-derivative instruments on the reporting date. For variable rate instruments, the sensitivity analysis assumes the variable rate liabilities are outstanding for the whole year on the reporting date. The exposure to changes in interest rates (assuming all other variables remain constant) would have influenced the comprehensive income for the years ended December 31, 2020 and 2019, as illustrated below:

	Range of the fluctuations	2020	2019
Annual interest rate	Increase of 1%	$ (10,706)	(8,450)
	Decrease of 1%	$ 10,706	8,450

(vi) Fair value of financial instruments

Categories of financial instruments and fair value

The carrying amount and fair value of the Company’s financial assets and liabilities, including the information on fair value hierarchy; however, for financial instruments not measured at fair value whose carrying amount is reasonably close to the fair value, and lease liabilities, disclosure of fair value information is not required. The Company’s financial instruments whose carrying amount is reasonably close to the fair value disclosure of fair value information is not required.

(22) Financial risk management

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and process for measuring and managing risk. Further quantitative disclosures are included throughout the relevant footnotes of the parent-company-only financial statements.

(i) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework.

The Company’s risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company’s activities.

The financial management department provides services for each business, coordinating access to domestic and international financial market operations, monitors and manages the financial risks associated with the operations of the Company by analyzing the internal risk report on risk based on the degree and extent of the risk. The risk including credit risk, liquidity risk and market risk. The market risk which including currency risk, rate risk, and other market price risk.

(ii) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company deposits its cash and cash equivalents with reputable banks; thus, the credit risk is low.

The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, the management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate. The Company limits its exposure to credit risk by establishing a dedicated team that is responsible for customer' s credit assessment and approval, limit and monitoring procedures. This is to ensure that appropriate actions are taken for the recoverability of overdue receivables. In addition, the Company will review the recoverable amount of the receivables individually at each reporting date so that impairment losses are appropriately provided for those irrecoverable receivables.

The Company' s policy is to provide financial guarantees only to wholly owned subsidiaries. There is no endorsement guarantee to entity other than subsidiary on December 31, 2020 and 2019.

(iii) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company' s approach to managing liquidity is to ensure, as far as possible, that it always has sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company' s reputation.

The Company manages and maintains sufficient cash and cash equivalents so as to cope with its operations and mitigate the effects of fluctuations in cash flows. The Company' s management supervises the banking facilities and ensures compliance with the terms of loan agreements.

(iv) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates, and equity prices, will affect the Company' s income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

1) Currency risk

The Company is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Company's entities, primarily the USD.

Interest in borrowing is denominated with the same currency of borrowing principal. Generally, the denominated currency of borrowing is the same with the Company's cash flow generated from operation, primarily in TWD, but also USD. Under these circumstances, the natural economic hedge exists without using derivative instrument.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Company ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

2) Interest rate risk

The Company's short-term and long-term borrowings are carried in variable interest rates. Therefore, the fluctuation of market rate will make the effective interest rate of short-term and long-term borrowings changed accordingly which resulted fluctuation in future cash flows.

(23) Capital management

The primary objective of the Company's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios to support its business and maximize shareholder's value.

The Company's industry is volatile, capital and technology-intensive industries, and the Company's life cycle is in a stable growth stage of operation. The remaining dividend policy must be adopted at this stage with funds to retain the surplus in response to operational growth and investment needs. The cash dividend distributed by the shareholder bonus shall not be less than 20% of the total distribution.

The top management of the Company re-examines the capital structure every six months, and its review includes consideration of the cost of each category of capital and related risks. Based on the recommendations of the top management, the Company will balance its overall capital structure by paying dividends, issuing new shares, buying back shares and issuing new debts or repaying old debts.

As of December 31, 2020, the way in which the Company's capital management was managed has not changed.

The debt-to-equity ratio at the reporting date is as follows:

	December 31, 2020	December 31, 2019
Total liabilities	$ 1,696,847	1,586,550
Less: cash and cash equivalents	(310,493)	(448,113)
Net debt	**$ 1,386,354**	**1,138,437**
Total equity	**$ 3,253,193**	**3,321,360**
Debt-to-equity ratio	**42.62%**	**34.28%**

(24) Financing activities not affecting current cash flow

Reconciliation of liabilities arising from financing activities were as follows:

	January 1, 2020	Cash flows	Non-cash changes: Foreign exchange movement and others	December 31, 2020
Short-term notes and bills payable	$ 230,000	(150,000)	-	80,000
Short-term borrowings	$ 622,956	273,993	5,311	902,260
Long-term borrowings (including current portion)	$ 433,333	2,667	-	436,000
Lease liabilities	$ 33,588	(12,348)	42,049	63,289

	January 1, 2019	Effects of retrospective application	Cash flows	Non-cash changes: Foreign exchange movement and others	December 31, 2019
Short-term notes and bills payable	$ 80,000	-	150,000	-	230,000
Short-term borrowings	$ 1,178,105	-	(556,374)	1,225	622,956
Long-term borrowings (including current portion)	$ 227,778	-	205,555	-	433,333
Lease liabilities	$ -	38,725	(12,379)	7,242	33,588
Convertible bonds payable	$ 4,395	-	-	(4,395)	-

7. Related-party transactions

(1) Names and relationship with related parties

Name of related party	Relationship with the Company
Coremax (BVI) Corporation	The subsidiary of the Company
Coremax (Thailand) Co., Ltd.	The subsidiary of the Company
Uranus Chemicals Co., Ltd.	The subsidiary of the Company
Hengi Chemical Co., Ltd.	The subsidiary of the Company
Coremax Zhuhai Chemical Co., Ltd.	The subsidiary of the Company
Coremax Ningbo Chemical Co., Ltd.	The subsidiary of the Company
Coremax (Zhangzhou) Chemical Co., Ltd.	The subsidiary of the Company
Jiangxi Tianjiang Materials Co., Ltd.	The subsidiary of the Company
ITOCHU CORPORATION	Director of the Company (Note)

Note: ITOCHU CORPORATION that has transferred, during the term of office as a director, more than one half of the Company's shares being held by him at the time he is elected, he shall, ipso facto, be discharged from the office of director on February 20, 2020.

(2) Significant related-party transactions

(i) Operating revenue

	2020	2019
Subsidiaries	$ 305,338	374,885
Director of the Company	-	-
	$ 305,338	**374,885**

The selling prices for sales to related parties and collection period were similar to those for unrelated customers.

As of December 31, 2020, and 2019, the unrealized profit or loss from sales with the investees under equity method amounted to $3,716 and $843, respectively, which were deducted from the investments accounted for using the equity method.

(ii) Purchase

	2020	2019
Subsidiaries	$ 3,453	1,117
Director of the Company	-	6,957
	$ 3,453	**8,074**

The terms and pricing of purchase transactions with related parties were not significantly different from those offered by other vendors.

(iii) Accounts receivable from related parties

The receivable from related party was as follows:

	December 31, 2019	December 31, 2019
Subsidiaries	**$ 56,638**	**118,805**

(iv) Accounts payable to related parties

The payables to related parties were as follows:

Related Party Categories	December 31, 2020	December 31, 2019
Subsidiaries	**$ 5,140**	**8,652**

(v) Service revenue

For the years 2020 and 2019, revenues of the Company incurred due to the departmental support by subsidiaries amounted to $1,476 and $1,495, respectively.

(vi) Processing charges

For the years 2020 and 2019, expenses of the Company incurred due to the processing by subsidiaries amounted to $32,821 and $3,457, respectively.

(vii) Endorsement guarantee

As of December 31, 2020 and 2019, the Company' s endorsement guarantee provided to subsidiaries amounted to $85,440 and $89,940, respectively.

(viii) Rental

(a) Rental income and imputed interest

The Company enters into a lease agreement with its subsidiaries. The rental income recognized in years 2020 and 2019 were $867 and $324 respectively. The imputed interest recognized in years 2020 and 2019 were $28 and $26 respectively.

(b) Utilities, fuel fee and others

The Company rented land and factories, etc. from subsidiaries, the amount paid for related expenses in years 2020 and 2019 were $25,605 and $30,600, respectively.

(c) The Company rented land and offices from subsidiaries. The leases typically run for the period of 2 to 10 years. The Company applied IFRS 16, with a date of initial application on January 1, 2019. This lease transaction recognized the additional amounts of $38,231 and $38,231 of right-of-use assets and lease liabilities, respectively. For the years 2020 and 2019, the Company recognized the amount of $826 and $843 as interest expense, respectively. As of December 31, 2020, and 2019, the balance of lease liabilities amounted to $59,131 and $29,059, respectively.

(d) For the year ended December 31, 2020, the amount paid by the Company to its subsidiaries for rent expenses incurred under the staff dormitory lease agreement was $72.

(e) In the third quarter of 2020, the Company leased its land and factories from a subsidiary, Hengi Chemical; thereafter, sub-leases them out to another subsidiary, Uranus Chemicals, under finance leases. The net book value of the right-of-use assets of $7,548 had been written-off on the starting date, resulting in the non-current lease receivable and sub-lease income of $8,130 and $391 to be recognized as other non-current assets and other income, respectively.

The amount paid by the Company and its related parties for receivable (payable) due from (to) related parties incurred under the rent expenses, interest income and other transactions, etc. were as follows:

Other receivables due from related parties

	December 31, 2020	December 31, 2019
Subsidiaries	$ 45,221	1,541

Accounts payable due to related parties

	December 31, 2020	December 31, 2019
Subsidiaries	$ 10,367	2,623

(3) Transactions with key management personnel

Key management personnel remuneration comprised:

	2020	2019
Short-term employee benefits	$ 11,079	12,335
Post-employment benefits	216	245
	$ 11,295	12,580

8. Pledged assets

Except for note 6(12), the carrying amount of the Company's pledged assets are as follows:

Assets	Purpose of pledge	December 31, 2020	December 31, 2019
Land	Long-term borrowings and obtaining credit limit for short-term borrowings	$ 130,864	130,864
Buildings	Long-term borrowings and obtaining credit limit for short-term borrowings	41,545	29,345
		$ 172,409	160,209

9. Commitments and contingencies

Except for the notes 6(11) and (13), the remaining statements were as follow:

(1) As of December 31, 2020, and 2019, the Company had acquired property, plant and equipment, with the remaining commitments of $3,519 and $4,687, respectively.

(2) As of December 31, 2020, and 2019, the subsidiary, Coremax (BVI) Corporation, had applied for a borrowing facility with an amount of USD3,000 (equivalent to $85,440 and $89,940, respectively) from a bank, in which the Company holds the responsibility as its joint guarantor.

10. Losses Due to Major Disasters: None

11. Subsequent Events

Pursuant to the board of directors' meeting on December 23, 2020, the Company expected to increase its paid in shares capital by 10,000 thousand shares at an amount of $10, with $50 TWD per share, for cash amounting to $500,000. The base date for this capital increase for cash is determined as January 25, 2021.

12. Other

A summary of employee benefits, depreciation, and amortization, by function, is as follows:

By function / By item	2020			2019		
	Classified as operating cost	**Classified as operating expenses**	**Total**	**Classified as operating cost**	**Classified as operating expenses**	**Total**
Employee benefits						
Salaries	66,336	41,854	108,190	71,944	42,893	114,837
Labor and health insurance	6,846	3,281	10,127	7,280	3,166	10,446
Pension	2,634	1,798	4,432	2,853	1,792	4,645
Remuneration of directors	-	1,919	1,919	-	1,956	1,956
Others	4,408	2,340	6,748	5,573	2,083	7,656
Depreciation	67,454	9,160	76,614	64,571	9,024	73,595

The amount of employees and employee benefits for the years ended December 31, 2020 and 2019, was follows:

	2020	2019
The number of employees	153	167
The number of directors who were not holding as a position of employee	7	8
The average of employee benefits	$ 887	865
The average of Salaries	$ 741	722
The average of salary adjust rate	3%	
Supervisor's remuneration	$ -	-

The Company's salary and remuneration policy (including directors, managers and employees) is as follows:

(1) Directors' remuneration: The remuneration of each director shall be proposed by the Salary Remuneration Committee for implementation after being approved by the Board of Directors.

(2) Salaries of employees and managers: Monthly salary will be determined with reference to the salary market conditions, job category, academic experience, professional knowledge and technology, seniority, practical experience, as well as personal performance, regardless of age, gender, race, etc.; and it will be adjusted in due course according to the Company's operating conditions, market wage dynamics, the overall economic and industrial climate changes, and the government laws and regulations.

(3) Year-end bonus for employees and managers is allocated according to the Company's operating conditions, with reference to each employee’s performance appraisal results.

(4) Remuneration for employees and managers is based on the Company's employee remuneration distribution policy, with reference to the achievement of personal goals, job contribution and overall performance of the individual.

The remuneration policies of the above-mentioned general manager, deputy general managers and equivalent position manager, in addition to the company’s business strategy, profit results, performance and job contribution etc. factors, and reference to the salary market level. The Salary Remuneration Committee puts forward a proposal and implement after approved by the Board of Directors.

13. Other disclosures:

(a) Information on significant transactions:

The following is the information on significant transactions required by the “Regulations Governing the Preparation of Financial Reports by Securities Issuers” for the Company:

Coremax Corporation
Notes to the Parent-Company-Only Financial Statements

(i) Loans to other parties:

Number	Name of lender	Name of borrower	Account name	Related party	Highest balance of financing to other parties during the period	Ending balance	Actual usage amount during the period	Range of interest rates during the period (Note 4)	Purposes of fund financing for the borrower	Transaction amount for business between two parties	Reasons for short-term financing	Allowance for bad deb	Collateral		Individual funding loan limits (Note 2)	Maximum limit of fund financing (Note 1)
													Item	Value		
1	Coremax (BVI) Corporation	Coremax Ningbo Chemical Co., Ltd.	Other receivables	Yes	24,200	22,784	-	4%	2	-	Operating demand	-	None	-	95,106	142,659
1	Coremax (BVI) Corporation	Coremax (Thailand) Co., Ltd.	Other receivables	Yes	24,200	22,784	22,784	4%	2	-	Operating demand	-	None	-	95,106	142,659
1	Coremax (BVI) Corporation	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	30,250	28,480	28,480	4%	2	-	Operating demand	-	None	-	95,106	142,659
2	Coremax Ningbo Chemical Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	17,516	17,508	-	4%	2	-	Operating demand	-	None	-	33,123	49,685
3	Coremax Zhuhai Chemical Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	13,317	13,131	-	4%	2	-	Operating demand	-	None	-	19,112	28,668
4	Jiangxi Tianjiang Materials Co., Ltd.	Coremax (Zhangzhou) Chemical Co., Ltd.	Other receivables	Yes	10,948	10,943	10,943	4%	2	-	Operating demand	-	None	-	13,589 (Note 3)	16,986 (Note 3)

Note1: Limit of total financing amount shall not exceed 30% of latest financial statements of the lender's capital.
Note2: Limit of financing amount for individual counter-party shall not exceed 20% of the latest financial statements of the lender's capital.
Note3: Limit of total financing amount shall not exceed 100% of latest financial statements of the lender's capital. Limit of financing amount for individual counter-party shall not exceed 80% of the latest financial statements of the lender's capital.
Note4: (1) Parties which have business relationship with the Company
(2) The need for short-term financing

Coremax Corporation

Notes to the Parent-Company-Only Financial Statements

(ii) Guarantees and endorsements for other parties:

No.	Name of guarantor	Counter-party of guarantee and endorsement		Limitation on amount of guarantees and endorsements for a specific enterprise (Note 2)	Highest balance for guarantees and endorsements during the period	Balance of guarantees and endorsements as of reporting date	Actual usage amount during the period	Property pledged for guarantees and endorsements (Amount)	Ratio of accumulated amounts of guarantees and endorsements to net worth of the latest financial statements	Maximum amount for guarantees and endorsements (Note 1)	Parent company endorsements / guarantees to third parties on behalf of subsidiary	Subsidiary endorsements / guarantees to third parties on behalf of parent company	Endorsements / guarantees to third parties on behalf of companies in Mainland China
		Name	Relationship with the Company										
0	The company	Coremax (BVI) Corporation	100% owned subsidiary of the parent company	650,638	90,750	85,440	51,264	-	2.63 %	1,626,596	Y	N	N

Note 1: The total amount for guarantees and endorsements provided by the Company to other entities shall not exceed 50% of latest financial statements of the Company's net worth audited.

Note 2: The total amount for guarantees and endorsements provided by the Company to any individual entity shall not exceed 20% of latest financial statements of the Company's net worth audited.

(iii) Securities held as of December 31, 2020 (excluding investment in subsidiaries, associates and joint ventures): None.

(iv) Individual securities acquired or disposed of with accumulated amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(v) Acquisition of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(vi) Disposal of individual real estate with amount exceeding the lower of NT$300 million or 20% of the capital stock: None.

(vii) Related-party transactions for purchases and sales with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None.

(viii) Receivables from related parties with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None.

(ix) Trading in derivative instruments:None.

(b) Information on investees:

The following is the information on investees of the Company for the year ended December 31, 2020 (excluding information on investees in Mainland China):

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		Balance as of December 31, 2020			Net income (losses) of investee	Share of profits/losses of investee	Note
				December 31, 2020	December 31, 2019	Shares (thousands)	Percentage of ownership	Carrying value			
The Company	Coremax (BVI) Corporation	British Virgin Islands	Investment company	302,406	302,406	9,658	100 %	475,529	37,444	37,444	
The Company	Hengi Chemical Co., Ltd.	Taiwan	Manufacturing and sales of chemical fertilizers, chemical raw materials, organic fertilizer and fertilizers with organic matter. Import and export of related business. Recycling and reproduce of solvent and pollutants.	823,294	823,294	31,913	80.18 %	1,215,080	136,912	109,195	
The Company	Uranus Chemicals Co., Ltd.	Taiwan	Manufacturing and sales of oxalic acid, organic and inorganic acid, rare earth compounds and related products	612,706	612,411	32,579	62.65 %	737,699	(69,567)	(32,561)	
Coremax (BVI) Corporation	Coremax (Thailand) Co., Ltd.	Thailand	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	67,047	67,047	70	100 %	55,067	6,023	6,023	

(c) Information on investment in mainland China:

(i) The names of investees in Mainland China, the main businesses and products, and other information:

Name of investee	Main businesses and products	Total amount of paid-in capital	Method of investment	Accumulated outflow of investment from Taiwan as of January 1, 2019	Investment flows		Accumulated outflow of investment from Taiwan as of December 31, 2020	Net income (losses) of the investee	Percentage of ownership	Investment income (losses) (Notes 3, 4)	Book value	Accumulated remittance of earnings in current period
					Outflow	Inflow						
Coremax Zhuhai Chemical Co., Ltd.	Production and sales of oxidation catalysts, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbents and cobalt compound series products.	38,775 (USD1,150)	Investment in companies in Mainland China through investment companies in the third regions.	38,775 (USD1,150)	-	-	38,775 (USD1,150)	(2,498)	100.00%	(2,498) (USD85)	95,561	-
Coremax Ningbo Chemical Co., Ltd.	Manufacturing and processing of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, exhaust gas absorbent and cobalt compound series products.	98,482 (USD3,000)	Investment in companies in Mainland China through investment companies in the third regions. (note 1)	81,240 (USD2,470)	-	-	81,240 (USD2,470)	2,290	100.00%	2,290 (USD78)	165,615	-
Coremax (Zhangzhou) Chemical Co., Ltd.	Manufacturing, processing and wholesale of pure terephthalic acid oxidation catalyst, sodium carbonate solutions, wastewater treatment solutions, waste gas absorbent and cobalt compound series products, and regeneration treatment of abort oxidation catalyst.	185,654 (USD6,280)	Investment in companies in Mainland China through investment companies in the third regions. (note 2)	148,795	-	-	148,795 (USD4,988)	30,279	100.00%	30,279 (USD1,025)	177,261	-
Jiangxi Tianjiang Materials Co., Ltd.	Manufacturing and sales of oxalic acid、organic and inorganic acid、rare earth compounds and related products	43,947 (USD1,350)	Uranus Chemical invest companies in Mainland China	43,947 (USD1,350)	-	-	43,947 (USD1,350)	(4,868)	100.00%	(4,868)	16,986	-

(ii) Limitation on investment in Mainland China:

Cumulated Investment in Mainland China as of December 31, 2020	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on Investment (Note 4)
312,757 (USD 9,958)	527,070 (USD 15,838)	1,951,915

Note 1: The paid-up capital amount is NT $98,482 (USD 3,000), which included the cash remitted by the Company through its subsidiary, Coremax (BVI) Corporation amounting to NT $81,240 (USD 2,470) and surplus from Coremax (BVI) Corporation amounting to NT $17,242 (USD 530).

Note 2: The paid up capital amount is NT $185,654 (USD 6,280), which included the cash remitted by the Company through its subsidiary, Coremax (BVI) Corporation, amounting to NT $124,097 (USD 4,200), surplus from Coremax (BVI) Corporation amounting to NT $6,055 (USD 200), Coremax (BVI) Corporation acquired of shares from other external shareholders amounting to NT $24,698 (USD 788) in obtaining paid up capital of NT$ 21,890 (USD 750), cash remitted by Coremax Zhuhai Chemical Co., Ltd. is amounting to NT$ 20,720 (USD 700), and cash remitted by Coremax Ningbo Chemical Co., Ltd. Is amounting to NT $12,892 (USD430).

Note 3: Amount was recognized based on the audited financial statement.

Note 4: The Company investment in Mainland China pursuant to "Principle of investment or Technical Cooperation in Mainland China" is not exceeding the investment amount or percentage limit.

(iii) Significant transactions:

The significant inter-company transactions with the subsidiaries in Mainland China, which were eliminated in the preparation of parent-company-only financial statements, are disclosed in “Information on significant transactions”.

(d) Major shareholders:

Shareholding / Shareholder’s Name	Shares	Percentage
CHANG XING INVESTMENT CO., LTD	13,202,833	14.19 %
CHEH JADE ENTERPRISE CO., LTD	12,156,477	13.06 %
FUBON LIFE ASSURANCE CO., LTD	4,763,085	5.11 %

14. Segment information

Please refer to consolidated financial statements for the year ended December 31, 2020.

Coremax Corporation

Statement of cash and cash equivalents

December 31, 2020

(In Thousands of New Taiwan Dollars; Foreign currencies: U.S. Dollars, Canadian Dollars and Euro)

Item	Description	Amount
Cash	Petty cash	$ 35
Deposits	Checking deposits	13,522
	Demand deposits	243,324
	Foreign currency deposits (USD: 1,396,804; CAD: 33.59; EUR: 394,928)	53,612
		310,458
	Total	**$ 310,493**

Note: Foreign exchange rates on the balance sheet date are as follows:

USD exchange rates：28.48

CAD exchange rates：22.35

EUR exchange rates：35.02

Coremax Corporation

Statement of notes and accounts receivable

December 31, 2020

(In thousands of New Taiwan Dollars)

Client Name	Amount
CP	$ 56,675
CS	26,259
CE	24,258
CQ	20,651
CD	16,424
CAB	15,716
CM	15,123
CN	14,121
Others (The amount of individual client included in others does not exceed 5% of the account balance.)	78,470
Notes and accounts receivables, net	**$ 267,697**

Note 1: The notes and accounts receivables are resulting from the operating activities.

Note 2: Receivables from related parties are not included. Please refer to note 7 for further details.

Coremax Corporation

Statement of inventories

December 31, 2020

(In thousands of New Taiwan Dollars)

Item	Amount		Note
	Cost	NRV	
Finished goods	$ 198,539	241,848	Note: Please refer to note 4(7) for further explanation of the net realizable value of inventories in the parent-company-only financial statements.
Work-in progress	308,101	332,653	
Raw materials	218,586	269,272	
Total	**$ 725,226**	**843,773**	

Statement of other current assets

Please refer to note 6(7) for further explanation of the other current assets in the parent-company-only financial statements.

Coremax Corporation

Statement of changes in investments accounted for using the equity method

December 31, 2020

(In thousands of New Taiwan Dollars)

Investees	Balance January 1, 2020 Shares	Balance January 1, 2020 Amount	Addition Shares	Addition Amount	Investment Income /Loss	Cash dividends	Cumulative translation adjustment	Remeasurements of the net defined benefit of subsidiaries	Others (Note 2)	Increase in unearned-related unearned related-parties' transactions profits	Balance December 31, 2020 Shares	Balance December 31, 2020 Amount	Balance December 31, 2020 %	Market Value Or Net Assets Value Unit Price	Market Value Or Net Assets Value Total Amount
Investments accounted for using the equity method：															
COREMAX(BVI) CORPORATION	9,658	$ 432,869	-	-	37,444	-	5,216	-	-	-	9,658	475,529	100.00%	-	475,529
Hengi Chemical Co., Ltd.	31,913	1,172,118	-	-	109,195	(63,825)	-	369	(2,777)	-	31,913	1,215,080	80.18%	-	1,215,450
Uranus Chemicals Co., Ltd.	31,310	778,319	1,270	295	(32,561)	(12,524)	218	156	3,796	-	32,580	737,699	62.65%	-	736,812
		2,383,306	1,270	295	114,078	(76,349)	5,434	525	1,019	-		2,428,308			2,427,791
Less: unearned-related transaction profits		(843)	-	-	-	-	-	-	-	(2,873)		(3,716)			-
		$ 2,382,463	1,270	295	114,078	(76,349)	5,434	525	1,019	(2,873)		2,424,592			2,427,791

Note 1: Equity investments were not provided as any guarantee or pledge.

Note 2: Including the Company did not subscribe to proportionately, share of subsidiary's fair value through other comprehensive income, differences between consideration and carrying amounts of subsidiaries shareholding acquired or disposed of and surplus due to cash dividends distributed to subsidiary.

Coremax Corporation

Statement of changes in property, plant and equipment

December 31, 2020

Please refer to note 6(8) for further explanation of the property, plant and equipment in the parent-company-only financial statements.

Statement of changes in accumulated depreciation of property, plant and equipment

Please refer to note 6(8) for further explanation of the accumulated depreciation of property, plant and equipment in the parent-company-only financial statements.

Statement of changes in right-of-use assets

Please refer to note 6(9) for further explanation of the right-of-use assets in the parent-company-only financial statements.

Coremax Corporation

Statement of changes in accumulated depreciation of right-of-use assets

December 31, 2020

Please refer to note 6(9) for further explanation of the accumulated depreciation of right-of-use assets in the parent-company-only financial statements.

Statement of deferred tax assets

Please refer to note 6(15) for further explanation of the deferred assets in the parent-company-only financial statements.

Statements of other non-current assets

Please refer to note 6(7) for further explanation of the other non-current assets in the parent-company-only financial statements.

Coremax Corporation

Statement of short-term borrowings

December 31, 2020

(In thousands of New Taiwan Dollars)

Type	Description	Balance, End of Year	Contract Period	Range of Interest Rates (%)	Unused Credit Facility	Collateral
Secured and purchase bank loans	Mega Bank	$ 552,260	2020.08~2021.06	0.76%~0.97%	47,740	Land and buildings
Secured and purchase bank loans	Land Bank	-			200,000	None
Secured and purchase bank loans	E.Sun Bank	-			150,000	None
Secured and purchase bank loans	Chang Hwa Bank	-			400,000	None
Secured and purchase bank loans	Hua Nan Bank	90,000	2020.12~2021.01	1.05%	160,000	None
Secured and purchase bank loans	KGI Bank	160,000	2020.10~2021.04	1%~1.09%	140,000	None
Secured and purchase bank loans	Cathay United Bank	100,000	2020.08~2021.02	0.92%	100,000	None
		$ 902,260			**$ 1,197,740**	

Coremax Corporation
Statements of long-term borrowings
December 31, 2020

Please refer to note 6(11) for further explanation of the long-term borrowings in the parent-company-only financial statements.

Statements of notes and accounts payables
December 31, 2020
(In thousands of New Taiwan Dollars)

Vendor Name	Amount
VCG	$ 62,528
VE	27,018
Others (The amount of individual vendor in others does not exceed 5% of the account balance.)	20,663
Total	**$ 110,209**

Note 1: The notes and accounts payable are resulting from the operating activities.

Note 2: Accounts payable to related parties are not included. Please refer to note 7 for further details.

Coremax Corporation

Statement of other current liabilities

December 31, 2020

(In thousands of New Taiwan Dollars)

Item	Amount
Repair payable	$ 5,488
Raw materials payable	4,159
Packing expense payable	2,862
Shipping expense payable	2,226
Indirect materials payable	1,934
Steam and fuel expense payable	1,623
Other expense payable	1,574
Other notes payable- equipment	1,529
Others (The amount of each item in others does not exceed 5% of the account balance.)	8,168
Total	**$ 29,563**

Coremax Corporation
Statement of deferred tax liabilities
December 31, 2020

Please refer to note 6(15) for further explanation of the deferred tax liabilities in the parent-company-only financial statements.

Statement of lease liabilities

Please refer to note 6(13) for further explanation of the lease liabilities in the parent-company-only financial statements.

Statement of operating revenue
For the year ended December 31, 2020

Please refer to note 6(19) for Revenue from contracts with customers.

Coremax Corporation

Statement of operating costs

For the year ended December 31, 2020

(Expressed in thousands of New Taiwan Dollars)

Item	Amount
Raw materials used:	
Balance, beginning of year	399,496
Plus: Raw materials purchased	2,625,241
Less: Raw materials used by other department	2
Raw materials, end of year	248,484
Raw materials used for the year	2,776,251
Materials used:	
Balance, beginning of year	2,604
Plus: Materials purchased	23,094
Less: Materials used by other department	4
Materials, end of year	2,718
Materials used for the year	22,976
Direct labor cost	57,311
Manufacturing expenses	229,520
Manufacturing cost	3,086,058
Plus: Work-in progress, beginning of year	433,893
Less: Work-in progress, end of year	308,102
Cost of finished goods	3,211,849
Plus: Finished goods, beginning of year	255,577
Less: Finished goods used by other department	56
Finished goods, end of year	210,238
Cost of goods sold for finished goods	3,257,132
Cost of Sales	3,257,132
Plus: Inventory purchased	197,530
Cost of goods sold for inventory	3,454,662
Loss from inventory devaluation	(36,000)
Revenue from sale of scrap	(213)
Other	(2,360)
Total	**$ 3,416,089**

Coremax Corporation

Statements of manufacturing expenses

For the year ended December 31, 2020

(In thousands of New Taiwan Dollars)

Item	Amount
Depreciation expense	$ 67,454
Original equipment manufacturer expense	32,821
Packing expenses	25,403
Steam and fuel expenses	25,111
Utilities expense	23,870
Payroll expense	19,310
Repair and maintenance expense	12,575
Others (The amount of each item in others does not exceed 5% of the account balance.)	22,976
Total	**$ 229,520**

Statement of selling expenses

Item	Amount
Import and export expense	$ 20,498
Payroll expense	5,515
Shipping expense	2,776
Others (The amount of each item in others does not exceed 5% of the account balance.)	4,539
Total	**$ 33,328**

Coremax Corporation

Statement of administrative expenses

For the year ended December 31, 2020

(In thousands of New Taiwan Dollars)

Item	Amount
Payroll expense	$ 25,055
Depreciation expense	7,130
Professional service fees	5,506
Others (The amount of each item in others does not exceed 5% of the account balance.)	16,342
Total	**$ 54,033**

Statement of research and development expenses

For the year ended December 31, 2020

(In thousands of New Taiwan Dollars)

Item	Amount
Payroll expense	$ 11,284
Laboratory expense	2,034
Depreciation on and amortization expense	1,661
Profession service fees	1,606
Others (The amount of each item in others does not exceed 5% of the account balance.)	4,437
Total	**$ 21,022**

Coremax Corporation

Statement of other gains and losses, net

For the year ended December 31, 2020

Please refer to note 6(21) for further explanation of the net other gains and losses in the parent-company-only financial statements.

Statement of finance costs

Please refer to note 6(21) for further explanation of the finance cost in the parent-company-only financial statements.

Summary statement of current period employee benefits, depreciation, depletion and amortization expenses by function

Please refer to note 12 for further explanation of the current-period employee benefits and depreciation expense in the parent-company-only financial statement.

Coremax Corporation

Chairman: Ho, Chi-Cheng