東聯化學股份有限公司
Oriental Union Chemical Corp.

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東聯化學

ORIENTAL UNION CHEMICAL CORPORATION

2018年報
Annual Report

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The English version is the translation of the Chinese text and if there is any discrepancy between the English version and the Chinese text of this document, the Chinese text shall prevail.

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I. Letter to Shareholders

I. Foreword

The Overlook of the Economic Growth and Petrochemical Industry in 2018

Since the global economy recovered at the H2/2016 and sliding down after reaching its peak at the H2/2017, the 2018 global economic growth came to 3.2%, slightly lower than the previous year at 3.3%, yet remained still the second best since 2011.

As outstanding as the 2018 economic growth rate of the US increased from 2.2% in 2017 to 2.9%, the China economic growth rate in 2018, on the contrary, dropped from 6.9% in 2017 to 6.7%, due to the impact of the China-US Trade War, which will lead to bilateral damages in the long run, as the consumers' purchasing power will be weakened by the costly merchandise charged under high tariff duty.

According to the analyses of the Industrial Technology Research Institute, the major factors affecting the global petrochemical industry in the recently years include (1) the development of shale gas/oil in the USA; (2) the development of the coal chemistry industry in China; (3) the crude oil prices, among which the crude oil prices were concluded as most crucial.

Since the end of September 2018, the factors such as global crude oil oversupply, the worry over the China-US Trade War, the uncertainty of Brexit, and the record-breaking of the US shale oil production have led to the collapse of crude oil prices in Q4/2018, resulting in Brent oil price plunging from USD87 to USD50 per barrel. The projections of 2019 oil prices by the investing banks vary.

Though the China-US Trade War has no direct impact on the petrochemical industry at the instant, it shall slow down the global economic growth, decreasing the growth of demand for petrochemical products and inevitably resulting in the market oversupply, and jeopardize the development of the global trade, economy and the petrochemical industry in the long run.

In view of the 2018 economic growth of Taiwan, which was 2.62% slightly lower than 3.08% in 2017, the gross output value of Taiwan petrochemical industry reached NTD1.85 trillion in 2018 with an annual growth rate of 6.2%, which could be attributed to the Brent crude oil prices, sustaining at about USD70 per barrel prior to the Q4/2018. The revenue growth and profit of the associated enterprises however remain the same as for 2017.

As China and the USA are two major markets for Taiwanese petrochemical products, the impact of China-US Trade War may be minor in the short term, owing to most of the supply is to meet the Chinese domestic demand. However, for the suppliers who rely mainly on export shall suffer from the overall economy decline of China in the intermediate and long run.

OUCC's Operating Results in 2018

Under such constantly changing environment, OUCC on the both sides of the Strait have been dedicating in the improvement of manufacturing processes, cost down, competitiveness, and striving for the business model transformation to develop high value-added, high tech, and green eco-friendly products to cope with the challenges.

In spite of the thriving markets of the first three quarters in 2018, which resulted in the rather good performance in revenues and profits, the overall profits dwindled on account of the plunge in raw materials and products prices in Q4. The annual revenues topped the new height, with consolidated revenue totaled NTD33 billion, an increase of 11% compared to the previous year, and the net operating income NTD3.3 billion of a 10% net income rate.

The net income attributable to OUCC was NTD1.75 billion, the earning per share (EPS) NTD2.01, and the return on equity (ROE) 11.8%.

II. OUCC's Operation Performance in 2018

Safety, Health, and Environment

OUCC values industrial safety, health, environmental conservation, and complies with all the related ISO management regulations and accomplishes the efficient on-job training. Our cumulated safety man-hour in Linyuan plant reached 3.69 million hours in 2018. Furthermore, we have the SHE related projects in process and technology continue at all time.

The projects undertaken in 2018 include the wastewater recycling system which aims to reuse approx. 70% of the current effluent water in Linyuan plant, upon its completion and activation in 2019, to achieve our goal on water resources conservation. Moreover, the waste liquor recovery of potassium iodide from our Ethylene Carbonate (EC) plant will reduce 400 MT of liquid waste per year. For energy conservation and carbon reduction, a lithium bromide double effect absorption chilling water system for our Ethylene Oxide/Ethylene Glycol (EOG) plant is installed and shall have annual power saving by 3.75 million kWh.

All the above-mentioned efforts and pursuit of OUCC aim to minimize the OUCC's impact on the environment to maintain a balanced development of the two.

Ethylene Glycol Business

The Ethylene prices remained high in H1/2018, as the market supply was tight due to the shut-down of naphtha crackers in Northeastern Asia. In the meanwhile, the prolonging ban on the usage of waste plastics in China led to the high demand for the downstream polyester business. In H2/2018, the EG prices plummeted following the weakened demand of the downstream, resulted from the drastic fall of crude oil and ethylene prices as the overall economic environment changed.

The total volume of EG produced in 2018, combining both OUCC Linyuan plant and FUPY Yangzhou plant, reached 742 thousand MT, a 3.6% growth comparing to 2017, and sold 784 thousand MT, of a 7% growth rate; whereas the combined EO total volume produced was 738 thousand MT, of a 4.5% growth rate, setting new historical heights for EG and EO.

Specialty Chemicals Business

The total volume of specialty chemicals produced in 2018, combining OUCC & FUPY, was 166 thousand MT, and sold 164 thousand MT, including 18 thousand MT of new product, ethylene glycol monobutyl ether (EB).

With EA new capacity from the Middle East and China launching the market, the off-balance EA global market deteriorated in 2018. OUCC's EA business strategy is to meet customers' requirements domestic and abroad, to balance the production and sales and ensure stable supply. The EOD sales volume of Linyuan plant increased 21% in growth, turning EOD business from loss to profit.

GAS Business

Although being in a steady growth in H1/2018, the GAS demand of Taiwan in H2/2018 decreased owing to the production reduction of the solar photovoltaic and the LCD panel industries affected by the fierce competition and stagnant demand in China. The prices of liquefied oxygen and nitrogen of China GAS industry kept soaring as steel mills were forced to shut down for failing to comply with the environmental laws and regulations; while the market demand decrease 20% comparing to the previous year, on account of the impact of China-US Trade War and the new policy on the solar photovoltaic.

With the vantage of nitrogen pipeline extending in Linyuan, our pipeline gas business increased 27% in comparison with 2017. To increase the liquefied gas business, GAS business is eagerly marketing the diverse industries, to avoid the risk of cyclic downfall of the industry.

The combined oxygen gas production volume in 2018 from OUCC Linyuan plant and TDIY Yangzhou totaled 584 thousand MT, which include 46 thousand MT for sales and the rest for internal use; nitrogen gas production volume totaled 411 MT, of which 364 thousand MT were sold.

III. 2019 Goals and Future Prospects

OUCC's Goals for 2019

The overall EG production loading in 2019 of Linyuan and Yangzhou will remain high with production volume planned at 805 thousand MT, of 8% increase in growth, along with the persistent efforts in unit production cost down. With the successive production launch of the Asian naphtha crackers at the H2/2019, the ethylene price is expected to be stable. And, with aid of a steady downstream demand, the sales volume is expected to increase.

To enlarge our market share, OUCC keeps marketing ethanolamines (EA), ethylene glycol monobutyl ether (BCS), as well as electronic-grade EA, and developing the applications of ethylene carbonate (EC) to lithium batteries and other industries. The lately developed polyols and other high value-added products aim to launch market in 2019. OPYC in Yangzhou will continue to enlarge its weighing proportion in self-owned products, and expand the markets of the high molecular weight and functional EO derivative products.

OUCC will promote relentlessly its pipeline gas business in Linyuan Industrial Park and Yangzhou Chemical Industrial Park to increase its liquefied gas marketing channels, and advance its sales in electronic-, food-, and medical-grade carbon dioxide.

Economy Perspective for 2019

The influences of the China-US Trade War and the realization of Brexit may expand to other economies and become threats to the global economic development.

According to the IMF forecast, the global economic growth rate in 2019 would be 3.5%, while that of the US will drop back to 2.7%, and China down to 6.1%, as the second lowest in China since 1990 at 3.2%. Same with Taiwan, as the 2019 economic growth rate will slide down to 2.18% from 2.62% in 2018.

Owing to the highly integrated industries between Taiwan and China, the apparent impact of the China-US Trade War, should it keep augmenting, shall not only hit the global and China economies, but also Taiwan and its petrochemical industry.

OUCC's Operational Perspective

Facing the severe external challenges, OUCC shall successively strive for the process improvement, product development, and the stabilization of raw material supply. To secure the storage logistics of raw materials, a cryogenic ethylene storage tank on the Intercontinental Container Terminal of the Port in Kaohsiung is undertaken as a joint venture project of OUCC.

OUCC is also engaged proactively in the development of various high value-added EO derivatives to be used in polyurethane products, optical coating, electronics process auxiliaries, textile auxiliaries, construction and architecture, medical therapy, cosmetics, to reduce the cyclic impacts of the industries. To meet the diverse demands of the customers, we continue polyol development to offer the cutting-edge products of OUCC, which manifest our efforts in speeding transformation into a specialty chemical company producing functional, closer to end-users, and customer-oriented products.

Furthermore, OUCC continues to elevate its energy efficiency, focus on green production, and plans to install a cogeneration unit and the boiler emission improvement equipment to reduce CO_2 emission 120,000 MT annually, in hopes of achieving our mission in corporate sustainability, while pursuing profit and growth.

To seek for the opportunities to obtain the EG or ethylene via ethane cracking from US shale gas has been our goal. With Far Eastern Group's acquisition of the polyester plants in West Virginia and Texas in 2018, our destination become clear. The attention to be drawn will be the impact on EG oversupply in North America and the high tariff duty China imposes upon the USA.

Chairman of the Board 徐旭東

II. Company Profile

1. Date of incorporation: December 22, 1975

2. Company history

In 1975
- Registration and incorporation of the Company was approved, with the shareholders including Central Investment Holding Co, Executive Yuan Development Fund, the Far Eastern Textile Corporation (now known as Far Eastern New Century), Union Carbide Corporation, USA, and the China Development Corporation; the capital was NTD$569,250,000.

In 1978
- Construction of the EG plant was completed.

In 1982
- The Union Carbide Corporation, USA withdrew from the Company, and the Union Industrial GAS Company co-invested together with Central Investment Holding Co and CPC was consolidated into the Company; capital increased to NTD$1,493,658,000.

In 1986
- Office premises at Fu-Hsing N Road, Taipei City were purchased and Head Office was relocated to the premises.

In 1987
- The Company was publicly listed on the Taiwan Stock Exchange on October 21.

In 1988
- Land was purchased in the Chienchen District, Kaohsiung City occupying an area of about 5.704 acres at the price of about NT$1 billion.

In 1992
- An EG waste water treatment plant that meets the national standards for discharge of waste water was completed.

In 1993
- Addition of the 2nd gas plant increased the output of gas products.

In 1995
- About 9% of the equity of ICI Far Eastern Co Ltd (now OPTC) was acquired.

In 1997
- The second LPG plant was added to increase the output of liquid nitrogen and liquid oxygen by a total of 73,000 tons each year.

In 1998
- May: Reinvestment was made to establish the Ton Fu Investment Corporation, a subsidiary wholly owned by OUCC.
- The Company's Linyuan Plant was certified under ISO-14001 (environmental protection management), and hit the unprecedented record for zero labor safety incidents for 2 million man-hours consecutively.
- December: Issue of the first secured common corporate bonds in the amount of NT$800 million, valid for 5 years.

In 1999
- January: A branch office was established in the Kaohsiung Nantz Export Zone, and an on-site gas factory was built to expand the gas operation.
- February: Completed the debottlenecking of EO/EG to increase the output of EO and EG by about 70,000 tons and 40,000 tons per year.

In 2000
- September: Implemented the SAP Enterprise Resource Planning (ERP) System.
- December: Treasury stock, totaling 5,213 thousand shares was repurchased for the first time to maintain goodwill and shareholder equity.

In 2001
- April: Completed cancellation of the treasury stock repurchased for the first time.

- April: Repurchased treasury stock, totaling 9,995 thousand shares, for the second time, and completed the cancellation in September.
- September: Repurchased treasury stock, totaling 7,349 thousand shares, for the third time to transfer shares to the employees.

In 2002
- July: Completed the EA factory dedicated to producing MEA, DEA and TEA, with an annual output of 40,000 tons, to become the factory with the largest output in Asia.
- July: The Company's Linyuan factory was certified under ISO-9001 (quality management).
- September: The Company's Linyuan factory was certified under OHSAS-18001 (occupational safety & health management).
- November: Completed the EC factory dedicated to the production of EC with an annual output of 40,000 tons. It became the EC factory with the largest output in the world and supplies raw materials to the Chi Mei ASAHI CORPORATION, a joint venture of Chi Mei Corporation and the Asahi Kasei Corporation (consolidated to form the Chi Mei Corporation on April 1, 2009) dedicated to producing PC.

In 2003
- February and December: With approval of the Investment Commission, MOEA, Bermuda-based PET Far Eastern (Holding) Ltd. (PETH) and Virgin Islands-based Pacific Petrochemical (Holding) Ltd. (PPL) reinvested in the Oriental Petrochemical (Shanghai) Corporation. The company was engaged in the production and marketing of PTA. The Company acquired about 39% of the equity.

In 2004
- August: Completed the transfer of Company shares, repurchased for the third time, to employees.
- November: The Company won the most honorable award for the industry in Taiwan, the "Sustainable Industry Excellence Award", as a symbol of sustainable development by the enterprise.

In 2005
- February: Issue of common stock totaling 60,000,000 shares at NT$28 per share by a capital increase in cash, which raised the fund to a total of NT$1,680,000,000.
- August: Completed the multi-functional pilot plant designed and configured independently by the Company as a base for the development of new technology for OUCC products. As well as for the basic design of production processes and test runs of new products.

In 2006
- January: Acquired 20% of the equity of the Kuokuang Petrochemical Technology Company. The company schedules production of various gasoline and chemical products made from crude oil or natural gas.

In 2008
- January: Completed the second EA factory with an annual output of 40,000 tons, dedicated to the production of MEA, DEA and TEA.
- January: Completed debottlenecking EC to increase output by about 20,000 tons per year.
- October: With the approval of the Investment Commission, MOEA, OUCC (Bermuda) Holding Ltd reinvested in the incorporation of Oriental Petrochemical (Yangzhou) Corporation. The company was primarily engaged in the production and marketing of ethanolamine, EC, AEO, PEG and MPEG.

In 2009 ● December: Received the "National Industrial Park Safe Partner Excellence Award – Excellent Business Unit 2009" by the Council of Labor Affairs, Executive Yuan.

In 2010 ● February: Subscribed for PPL shares from Yung Ding Investment Co and Core Pacific Capital Ltd, and sold PETH shares to Far Eastern New Century, and held 100% of the shares of PPL, and 39% of Oriental Petrochemical (Shanghai) Corporation indirectly.

In 2011 ● April: Completed the Oriental Petrochemical (Yangzhou) Corporation EA factory which has an annual output of 40,000 tons.

● December: Completed the EOD factory, at the Linyuan Factory premises, which has an annual output of 40,000 tons.

In 2012 ● July: Completed the Oriental Petrochemical (Yangzhou) Corporation EOD factory which has an annual output of 60,000 tons.

● September and December: With the approval of the Investment Commission, MOEA, Pacific Petrochemical (Holding) Ltd (PPL) reinvested in the Far Eastern Union Petrochemical (Yangzhou) Corporation. The company was primarily engaged in production and marketing of EO/EG. The Company held 50% of its shares indirectly.

In 2013 ● December: Revoked company registration of the Nantz branch office.

In 2014 ● February: With the approval of the Investment Commission, MOEA, Pacific Petrochemical (Holding) Ltd. (PPL) reinvested in the Tong Da Gas Industries (Yangzhou) Ltd. The company was primarily engaged in the construction of a cryogenic ethylene tank and an Air Separation Unit (ASU).The Company held 50% of its shares indirectly.

In 2015 ● February: Completed re-debottlenecking projects of EO & EG, with respective output of 360,000 tons and 300,000 tons.

● December: Completed gas plant of Tong Da Gas Industries (Yangzhou) Ltd, with annual output of 800,000 tons.

In 2016 ● June: Completed the gas plant at Linyuan, with annual output of 340,000 tons.

● June: Commercial launch of the EO and EG plants of the Far Eastern Union Petrochemical (Yangzhou) Corporation, with respective annual output of 400,000 tons and 500,000 tons.

● December: Completed the 3rd CO2 plant at Linyuan, with annual output of 40,000 tons.

In 2017 ● December: Completed the renovation of the 1st EA plant into EBDB plant at Linyuan, with annual output of 20,000 tons.

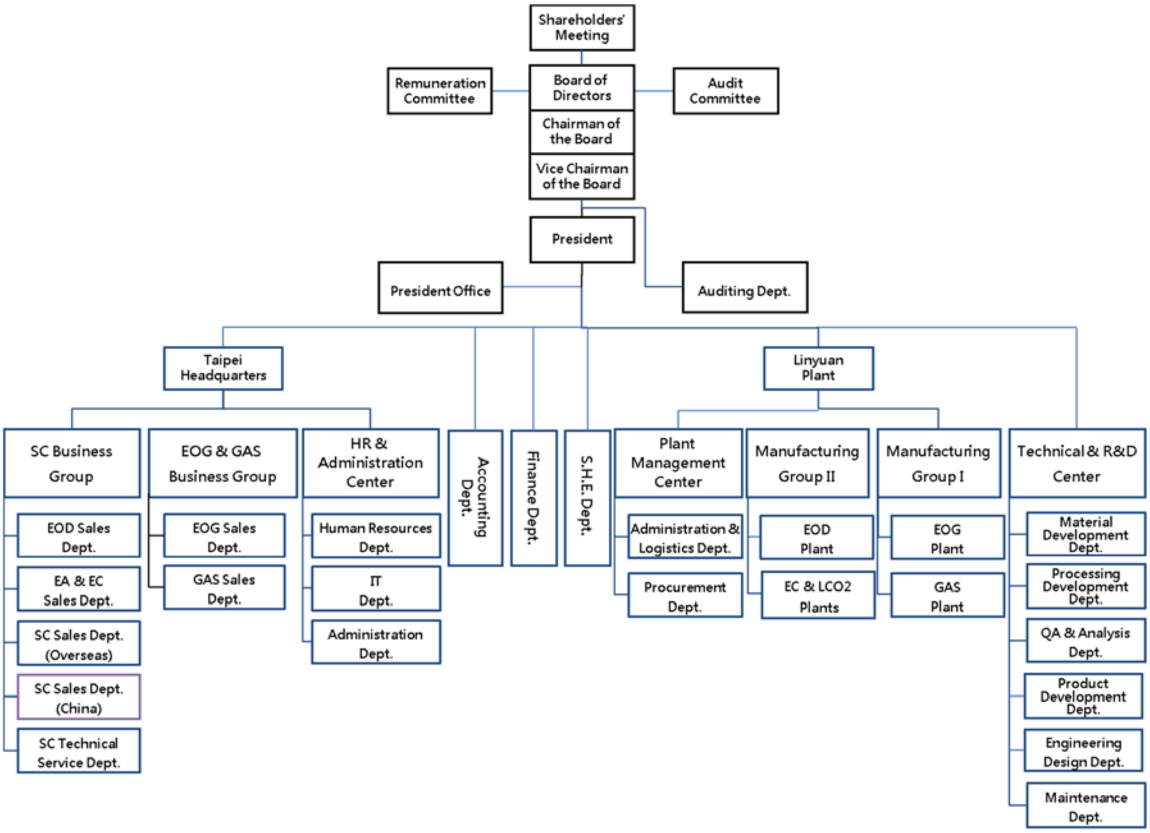
In 2018 ● February: Completed the technical renovation of the EOD plant of Oriental Petrochemical (Yangzhou) Corporation, expanding EOD annual output to 66,000 tons.

In 2019 ● March: Far Eastern Union Petrochemical (Yangzhou) Corporation received the 2nd Jiangsu Province Zifeng Award

III. Corporate Governance Report

1. Organization

1.1 Organizational Chart



1.2 Functions & Operations

Department	Functions & Operations
President Office	The President's staff unit.
HR & Administration Center	1. Management of human resources related affairs. 2. Management of general related affairs. 3. IT system management and implementation.
EOG & GAS Business Group	1. Sale of EO and EG products and procurement of major raw materials. 2. Sale of gas products
SC Business Group	1. Sale of EOD and other specialty chemicals 2. Sale of EA, EC, and BCS products 3. Sale of specialty chemicals abroad and channel establishment 4. Sale & development of specialty chemicals and EA products in China 5. Technical support of specialty chemicals, new application development and specification formulation of new product
Plant Management Center	1. Plant administration, logistics and transportation related affairs. 2. Procurement of raw materials and supplies, awarding of contracts, and the related.
Manufacturing Group I	1. Production of MEG, DEG, EO, EA and EBDB 2. Production of Gas (oxygen, nitrogen, argon gas and liquefied CO_2)
Manufacturing Group II	1. Production of the specialty chemical of EOD 2. Production of the specialty chemical of EC
S.H.E. Dept.	Environmental protection, labor safety and other safety-related matters
Technical and R&D Center	1. Project execution, production process improvement & evaluation, and engineering related matters 2. R&D of EOD materials and new products, etc. 3. Process development and technical support, etc. 4. Analysis, testing and quality assurance, etc. 5. Mass production tests and the related 6. Maintenance of instruments, machinery, electrics & mechanics, and pipelines, etc.
Finance Dept.	Insurance, shareholders' service, credit investigation and financial management and the related
Accounting Dept.	Taxation, budgeting, accounting management and the related
Auditing Dept.	Internal audit

2. Information on the company Directors, Supervisors, President, Vice Presidents, Assistant Vice Presidents, and heads of all company divisions and branch units:

2.1 Directors & Supervisors

2.1.1 Directors & Supervisors

April 13, 2019

Job title	Nationality or residence registered	Name	Date on which current position was assumed	Term of office	Commen-cement date of the first term	Shares held when appointed		Shares held currently		Shares held by spouse and minor children		Shares held in another person's name		Work experience (academic degree)	Position(s) held concurrently in the Company and/or in any other company	Other heads, directors, or supervisors as spouse or kin within the second degree		
						Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion			Job title	Name	Relationship
Chairman of the Board	R.O.C.	Douglas T. Hsu	2018.6.8	3 years	1979.2.10	1,664,781	0.19%	1,664,781	0.19%	0	0.00%	0	0.00%	Honorable PhD in Management, NCTU; Master in Univ. of Notre Dame Master of Arts in Post Economics, Columbia University, USA	Chairman of Far Eastern New Century, Asia Cement, U-Ming Marine Transport Corp, Far Eastern Department Stores, and Fetnet, and Vice Chairman of Far Eastern International Bank	Vice Chair-man of Board	Johnny Shih	A relative by marriage within the second degree
Vice Chairman of the Board	R.O.C.	Representative of Far Eastern New Century: Johnny Shih	2018.6.8	3 years	1988.5.18	81,217,005 560,871	9.17% 0.06%	81,217,005 560,871	9.17% 0.06%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	Master in Computer Science, Columbia University, USA	Vice Chairman of Far Eastern New Century, Chairman of Everest Textile, Director of Asia Cement, and CTCI	Chair-man of Board	Douglas T Hsu	A relative by marriage within the second degree
Director	R.O.C.	Representative of Far Eastern New Century: Humphrey Cheng	2018.6.8	3 years	1991.5.30	81,217,005 941	9.17% 0.00%	81,217,005 941	9.17% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	Master in International Business, National Taiwan University	President of Administration HQ of Far Eastern New Century, Director of Far Eastern International Bank, and Chairman & President of Tong Fu Investment Corporation	N/A	N/A	N/A
Director	R.O.C.	Representative of Far Eastern New Century: Kao-Shan Wu	2018.6.8	3 years	2009.6.3	81,217,005 0	9.17% 0.00%	81,217,005 0	9.17% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	Bachelor in Chemistry, Chinese Culture University	President of Petrochemical Headquarters of Far Eastern New Century; Director of Everest Textile and Oriental Petrochemical Corporation	N/A	N/A	N/A
Director	R.O.C.	Representative of Far Eastern New Century: Roy Wu	2018.6.8	3 years	2003.5.27	81,217,005 0	9.17% 0.00%	81,217,005 0	9.17% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	PhD in Materials Engineering, Monash University, Australia	Vice President of R&D Center of Far Eastern New Century Director of Oriental Resources Development Co. Ltd.	N/A	N/A	N/A

Job title	Nationality or residence registered	Name	Date on which current position was assumed	Term of office	Commen-cement date of the first term	Shares held when appointed		Shares held currently		Shares held by spouse and minor children		Shares held in another person's name		Work experience (academic degree)	Position(s) held concurrently in the Company and/or in any other company	Other heads, directors, or supervisors as spouse or kin within the second degree		
						Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion	Quantity of shares	Shares held Proportion			Job title	Name	Relationship
Director	R.O.C.	Representative of Yue Ming Trading Co Ltd: Justin Tsai	2018.6.8	3 years	2014.7.1	440,000 0	0.05% 0.00%	440,000 0	0.05% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	EMBA, National Chengchi University, Bachelor in Chemical Engineering, Tunghai University	Director of Oriental Petrochemical (Yangzhou) Corp., Far Eastern Union Petrochemical (Yangzhou) Ltd., Tong Da Gas Industries (Yangzhou) Ltd., and Feng Tay Enterprises Co. Ltd.	N/A	N/A	N/A
Director	R.O.C.	Representative of Yu Li Investment Corporation: Paul Chuang	2018.6.8	3 years	2009.6.3	4,861,781 7,997	0.55% 0.00%	4,861,781 7,997	0.55% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	Bachelor in Chemical Engineering, National Cheng Kung University	President of Oriental Petrochemical (Shanghai) Corporation	N/A	N/A	N/A
Director	R.O.C.	Representative of Fu Da Transport Corporation: Eric Chueh	2018.6.8	3 years	2012.6.5	3,254,125 0	0.36% 0.00%	3,254,125 0	0.36% 0.00%	0 0	0.00% 0.00%	0 0	0.00% 0.00%	MBA, National Chengchi University	President of Oriental Petrochemical Corporation	N/A	N/A	N/A
Independent Director	R.O.C.	C. T. Chan	2018.6.8	3 years	2015.6.9	0	0.00%	0	0.00%	0	0.00%	0	0.00%	High school graduated	Chairman of Yi Jinn Industrial Co. Ltd., Yi Tong Fiber Co. Ltd., Kwang Ming Silk Mill Co. Ltd., Hong Chou Fiber Industrial Co. Ltd., Jinn Hsien Foundation, and Taiwan Textile Federation. Executive Director of National Federation of Industries	N/A	N/A	N/A
Independent Director	R.O.C.	Walt Cheng	2018.6.8	3 years	2015.6.9	0	0.00%	0	0.00%	0	0.00%	0	0.00%	Bachelor in Chemical Engineering, National Cheng Kung University	President of Axolar Technology Corporation	N/A	N/A	N/A
Independent Director	R.O.C.	Ping Lih	2018.6.8	3 years	2018.6.8	0	0.00%	0	0.00%	0	0.00%	0	0.00%	Master in Accounting, Texas University, USA Partner of Deloitte & Touche	Director of T N Soong Foundation	N/A	N/A	N/A

2.1.2 Major shareholders of corporate shareholders

April 13, 2019

Name of corporate shareholders	Major corporate shareholders (shareholding %)
Far Eastern New Century Corporation	Asia Cement (24%), Oriental Institute of Technology (5%), Far Eastern Medical Foundation (4%), Far Eastern Y Z Hsu Science and Technology Memorial Foundation (3%), Yuan Ze University (3%), Nan Shan Life Insurance Co Ltd (3%), Cathay Life Insurance Co Ltd (2%), Douglas Tong Hsu (2%), China Life Insurance Co Ltd (2%), Der Ching Investment Corp (2%)
Yue Ming Trading Co Ltd	Pai Ding Investment Co Ltd (47%), Yuan Ding Investment Co Ltd (45.5%), Yue Ding Industries Co Ltd (5%), Ding Ding Business Consultation Co Ltd (1%), Yuan Ding Co Ltd (1%), Yuan Ding Lease Co Ltd (0.5%)
Yu Li Investment Co Ltd	U-Ming Marine Transport Corp (68%), U-Ming Marine Transport (Singapore) Pte Ltd (32%)
Fu Da Transport Corporation	Fu Ming Transport Corp (99.88%), Johnny Shih (0.03%), Kun Yen Lee (0.03%), Yze Wen Wang (0.03%), Asia Investment Corp (0.03%)

2.1.3 Major shareholders who are corporations

April 13, 2019

Name of corporation	Major corporate shareholders (shareholding %)
Asia Cement Corporation	Far Eastern New Century (22%), Far Eastern Medical Foundation (5%), Shin Kong Life Insurance Co Ltd (2%), New Labor Pension Fund (2%), Worker Pension Management Commission of Far Eastern New Century (2%), Far Eastern Department Stores (1%), China Life Insurance Co Ltd (1%), Yuan Ze University (1%), Far Eastern Y Z Hsu Science and Technology Memorial Foundation (1%), Yu Yuan Investment Co Ltd (1%)
Nan Shan Life Insurance Co Ltd	Ruen Chen Holdings Co Ltd investment trust account held under the Custody of First Bank (76%), Ruen Chen Investment Holding (15%), Du Ying-Tsung (3%), Ruenhwa Dyeling & Fabricating Co Ltd (0.27%), Ruentex Lease Co Ltd (0.14%), Ji Ping Investment Co Ltd (0.11%), Kuo Wen-Teh (0.11%), Pou Yi Investment Co Ltd (0.05%), Pou Hwang Investment Co Ltd (0.05%), Pou Huei Investment Co Ltd (0.05%), Pou Chih Investment Co Ltd (0.05%)
Cathay Life Insurance Co Ltd	Cathay Financial Holding Co Ltd (100%)
China Life Insurance Co Ltd	KGI Securities (10%), Singapore Government investment account under the custody of Citibank (3%), New York City Group trust investment account under the custody of Deutsche Bank Taipei Branch (3%), Saudi Arabia Central Bank investment account under the custody of JPMorgan Chase Bank Taipei Branch (3%), Videoland Television Network (2%), Cathay Life Insurance Co Ltd (2%), Invesco Asia stock Fund investment account under the custody of HSBC Commercial Bank Taipei Branch (2%), Abu

Name of corporation	Major corporate shareholders (shareholding %)
	Dhabi Investment Authority investment account under the custody of JPMorgan Chase Bank Taipei Branch (1%), New Labor Pension Fund (1%), Norwegian Central Bank investment account under the custody of Citibank Taiwan (1%)
Der Ching Investment Corporation	Asia Cement Corporation (100%)
Pai Ding Investment Co Ltd	Far Eastern Department Stores (67%), Pai Yang Investment Co Ltd (33%)
Yuan Ding Investment Co Ltd	Far Eastern New Century (99.4%), An He Apparel Co Ltd (0.3%), Da Chu Chemical Fiber Co Ltd (0.3%)
Yue Ding Industries Co Ltd	Fu Da Transport Corp (27%), Yue Tung Investment Co Ltd (25%), An He Apparel Co Ltd (16%), Ding Yuan International Co Ltd (13%), Ton Fu Investment Corporation (5%), Ya Li Precast Pre-stressed Concrete Industries Corp (4%), Da Chu Chemical Fiber Co Ltd (4%), Yuan Ding Investment Co Ltd (3%), Pai Ding Investment Co Ltd (2%), Yue Ming Trading Co Ltd (1%)
Ding Ding Business Consultation Co Ltd	Yue Tung Investment Co Ltd (40%), Da Chu Chemical Fiber Co Ltd (34%), Fu Da Transport Corp (16%), Asia Engineering Enterprise Co Ltd (5%), Pai Ding Investment Co Ltd (5%)
Yuan Ding Co Ltd	Far Eastern New Century (37%), Asia Cement (35%), Der Ching Investment Corp (15%), Yuan Ding Investment Co Ltd (13%), Yue Ming Trading Co Ltd (0.002%)
Yuan Ding Lease Co Ltd	Yuan Ding Investment Co Ltd (46%), Asia Cement (44%), Far Eastern Department Stores (9%), Yue Yuan Investment Co Ltd (1%)
U-Ming Marine Transport Corp	Asia Cement (39%), Cathay Life Insurance Co Ltd (4%), Fubon Life Insurance Co Ltd (2%), Supervisory Board of Public Service Pension Fund (2%), TransGlobe Life Insurance Inc. (2%), Ding Shen Investment Co Ltd (1%), Yuan Ding Investment Co Ltd (1%), Yue Yuan Investment Co Ltd (1%), Asia Investment Corp (1%), Vanguard Emerging Markets Stock Index Fund account held under the custody of JPMorgan Chase Bank Taipei Branch (1%)
U-Ming Marine Transport (Singapore) Pte Ltd	U-Ming Marine Transport Corp (100%)
Fu Ming Transport Corporation	Asia Cement (99.8%), Johnny Shih (0.10%), Asia Investment Corp (0.02%), Ling Wan Chang (0.02%), Peter Hsu (0.01%), Chu Fan Hsu (0.01%), Douglas Tong Hsu (0.01%), Shu Ming Hsu (0.01%), Alice Hsu (0.01%), Nancy Hsu (0.01%),
Asia Investment Corporation	Asia Cement Corporation (100%)

2.1.4 Information of the Directors

May 15, 2019

Requirements / Name (Note 1)	Over five years of experience and the following professional qualifications			Independence criteria (Note)										Concurrently serving as an Independent Director of another listed company
	University teaching in areas of commerce, law, finance, accounting or related corporate business	Working as a judge, attorney, lawyer, accountant or other positions that require professional certification	Work experience in commerce, law, finance, accounting or related corporate activities.	1	2	3	4	5	6	7	8	9	10	
Douglas T Hsu			√			√				√		√	√	0
Johnny Shih			√			√				√		√		0
Humphrey Cheng			√			√	√			√	√	√		0
Kao-Shan Wu			√	√		√	√			√	√	√		0
Roy Wu			√	√		√	√			√	√	√		0
Justin Tsai			√			√	√	√	√	√	√	√		0
Paul Chuang			√	√		√	√	√	√	√	√	√		0
Eric Chueh			√	√		√	√	√		√	√	√		0
C. T. Chan			√	√	√	√	√	√		√	√	√	√	0
Walt Cheng			√	√	√	√	√	√	√	√	√	√	√	0
Ping Lih		√	√	√	√	√	√	√	√	√	√	√	√	0

Note: A "√" is marked in the space beneath a condition number when a Director or Supervisor has met that condition during the two years prior to election and during his or her period of service. The conditions are as follows:

(1) Not employed by the Company or any of the Company's affiliates.
(2) Not a Director of the Company or any of the Company's affiliates (this restriction does not apply to Independent Directors of the Company, its parent company, or its subsidiaries).
(3) Not holding over 1% of company shares or being a top 10 natural person shareholder in one's own name, held by a spouse or underage child, or held by nominee agreement.
(4) Not a spouse, kin at the second pillar under the Civil Code, or a lineal blood relative within the third pillar under the Civil Code as specified in (1) through (3).
(5) Not a Director, Supervisor or employee of a corporate shareholder who holds more than 5% of the outstanding shares issued by the Company, or a Director, Supervisor or employee of a corporate shareholder who is among the top 5 shareholders.
(6) Not a Director, Supervisor, manager or shareholder holding more than 5% of the outstanding shares of specific company or institution in business or financial relationship with the Company.
(7) Not a professional, owner, partner, Director, Supervisor, manager of proprietorship, partnership, company or institution that provides business, legal, financial and accounting services to the Company or a spouse to the aforementioned persons. Notwithstanding, this shall not apply to the Remuneration Committee members who perform their duties in accordance with Article 7 of the Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter.
(8) Not a spouse of or kin at the second pillar under the Civil Code to any other Director.
(9) Not under any of the categories stated in Article 30 of the Company Law.
(10) No government apparatus agency, juristic person or its representative is elected under Article 27 of the Company Law.

2.2 Information on the Company President, Vice President, Assistant Vice President, and heads of all the Company divisions and branch units:

April 13, 2019

Job title	Nation-ality	Name	Date on which current position was assumed	Shares held when appointed		Shares held by spouse and minor children		Shares held in another person's name		Work experience (academic degree)	Position(s) held concurrently in the Company and/or in any other company	Managers as spouse or kin within the second degree		
				Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion			Job title	Name	Relation-ship
President	R.O.C.	Justin Tsai	2013.1.1	0	0.00%	0	0.00%	0	0.00%	President of Some Petrochemical Corporation EMBA from National Cheng Chi University Bachelor in Chemical Engineering, Tunghai University	Director of Oriental Petrochemical (Yangzhou) Corp, Far Eastern Union Petrochemical (Yangzhou) Ltd, Tong Da Gas Industries (Yangzhou) Ltd, and Feng Tay Enterprises Co Ltd	N/A	N/A	N/A
President Office HR & Administration Center (Note1) HR Dept. IT Dept. Administration Dept. Vice President	R.O.C.	Victoria Peng	2018.3.20	228,258	0.03%	8,333	0.00%	0	0.00%	Vice President of HR & Administration Center of OUCC Master in Economic Science, Ohio State Univ. Bachelor in Economics, NTU	Director of Oriental Petrochemical (Yangzhou) Corp, Far Eastern Union Petrochemical (Yangzhou) Ltd, Tong Da Gas Industries (Yangzhou) Ltd and Ton Fu Investment Corporation, Supervisor of Far Eastern Yihua Petrochemical (Yangzhou) Corp	N/A	N/A	N/A
EOG&GAS Business Group EOG Dept. GAS Dept. Vice President	R.O.C.	C.K. Tsai	2008.4.1	375,471	0.04%	276	0.00%	0	0.00%	Assistant Vice President of OUCC Bachelor in Chemical Engineering, National Central University	Director of Oriental Petrochemical (Yangzhou) Corporation	N/A	N/A	N/A
Technical & R&D Center Material Development Dept. Processing Development Dept. Quality Assurance & Analysis Dept. Engineering Design Dept.	R.O.C.	Y. S. Chang	2016.11.5	0	0.00%	0	0.00%	0	0.00%	Assistant Vice President of Technical & RD Center of OUCC Master in Chemical Engineering, National Cheng Kung University	N/A	N/A	N/A	N/A

Job title	Nation-ality	Name	Date on which current position was assumed	Shares held when appointed		Shares held by spouse and minor children		Shares held in another person's name		Work experience (academic degree)	Position(s) held concurrently in the Company and/or in any other company	Managers as spouse or kin within the second degree		
				Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion			Job title	Name	Relation-ship
Product Development Dept. Maintenance Dept. Vice President														
Manufacturing Group II EOD Plant EC & CO2 Plants Plant Management Center Plant Admin. & Logistics Dept. Procurement Dept. Assistant Vice President and Deputy Chief Director	R.O.C.	Martin Kuo	2018.3.20	1,073	0.00%	0	0.00%	0	0.00%	Director of EOD Plant Bachelor in Chemical Engineering, Feng Chia University	N/A	N/A	N/A	N/A
Manufacturing Group I EOG Plants GAS Plants Assistant Vice President	R.O.C.	F.H. Chang (Note2)	2018.11.16	0	0.00%	0	0.00%	0	0.00%	Sr. Director of GAS&EC&LCO2 plants Master in Chemical Engineering, National Tsing Hua University	N/A	N/A	N/A	N/A
Finance Dept. Assistant Vice President	R.O.C.	Judy Wang	2010.1.1	23,672	0.00%	0	0.00%	0	0.00%	Senior Manager of Finance Dept. of OUCC Bachelor in Accounting, National Cheng Chi University	Supervisor of Far Eastern Union Petrochemical (Yangzhou) Ltd, Tong Da Gas Industries(Yangzhou) Ltd and Ton Fu Investment Corp	N/A	N/A	N/A
SC Business Group EA&EC Sales Dept. EOD Sales Dept. SC Overseas Sales Dept. SC China Sales Dept.	R.O.C.	Michael Chang (Note3)	2015.1.15	0	0.00%	0	0.00%	0	0.00%	Marketing Sales Manager of some US company and Paper company Master in Chemical Engineering, National Tsing Hua University	N/A	N/A	N/A	N/A

Job title	Nation-ality	Name	Date on which current position was assumed	Shares held when appointed		Shares held by spouse and minor children		Shares held in another person's name		Work experience (academic degree)	Position(s) held concurrently in the Company and/or in any other company	Managers as spouse or kin within the second degree		
				Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion	Quantity of shares	Shares held Propor-tion			Job title	Name	Relation-ship
SC Technical Service Assistant Vice President														
Maintenance Dept. Assistant Vice President	R.O.C.	Steven Wu	2016.11.15	159	0.00%	0	0.00%	0	0.00%	Senior Manager of Maintenance Dept. of OUCC Master in Engineering, National Cheng Kung University	N/A	N/A	N/A	N/A
Special Assistant of President Office (Assistant Vice President)	R.O.C.	Wen-Fan Lu	2009.9.1	0	0.00%	0	0.00%	0	0.00%	Assistant Vice President of President Office of Asia Cement PhD in Chemical Engineering, Houston University	N/A	N/A	N/A	N/A
Accounting Dept. Assistant Vice President (Note4)	R.O.C.	Allen Yu	2019.4.1	0	0.00%	0	0.00%	0	0.00%	Special Assistance of President Office of OUCC Bachelor in Accounting, Chung Yuan Christian University	Supervisor of YCMS, Far Eastern Group	N/A	N/A	N/A
Auditing Dept. Assistant Vice President	R.O.C.	Amy Cheng	2018.3.20	171,348	0.02%	0	0.00%	0	0.00%	Sr. Manager of Auditing Dept. of OUCC Bachelor in Accounting, Soochow University	Director of Ton Fu Investment Corporation	N/A	N/A	N/A
S.H.E. Dept. Manager	R.O.C.	Simon Chen	2018.3.20	0	0.00%	0	0.00%	0	0.00%	Assistant Manager of S.H.E. Dept. Master in Naval Architecture, NTU	N/A	N/A	N/A	N/A

Note 1: Mr. Roger Lin, originally positioned as Assistant VP of HR & Administration Center, resigned effective 16 September 2018, Mrs. Victoria Peng, VP of President Office has been concurrently in charge of the HR & Administration Center business ever since.

Note 2: Mr. D. K. Yu, originally Assistant VP of Manufacturing Group I, retired effective 30 October 2018, the Assistant VP, F. H. Chang, as his successor starting 16 November 2018.

Not3 3: Mr. Michael Chang, originally positioned as Assistant VP of SC Business Group, resigned effective 1 April 2019.

Note 4: Mr. Allan Yu, originally positioned as acting Assistant VP of Accounting Dept., has become authentic Assistant VP effective 1 April 2019.

2.3 Remuneration paid to Directors, Supervisors, Presidents, and Vice Presidents in the most recent year

2.3.1 Remuneration of Directors (Independent Directors included)

Currency unit: NTD thousand

<table>
<tr><th rowspan="4">Job title</th><th rowspan="4">Name</th><th colspan="8">Remuneration of Director</th><th colspan="2" rowspan="2">The sum of A, B, C and D in proportion to Earnings</th><th colspan="8">Remuneration in the capacity as employee</th><th colspan="2" rowspan="2">The sum of A, B, C, D, E, F and G to Earnings</th><th rowspan="4">Whether remuneration from any reinvestees other than subsidiaries is received? (J)</th></tr>
<tr><th colspan="2">Remuneration (A)</th><th colspan="2">Pension (B)</th><th colspan="2">Retained Earnings Distribution (C)</th><th colspan="2">Professional practice (D)</th><th colspan="2">Salaries, bonus and special subsidies (E)</th><th colspan="2">Pension (F)</th><th colspan="4">Employee bonus from earnings (G)</th></tr>
<tr><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th><th colspan="2">the Company</th><th colspan="2">Companies included in the financial statement</th><th rowspan="2">the Company</th><th rowspan="2">Companies included in the financial statement</th></tr>
<tr><th>Cash dividend</th><th>Stock dividend</th><th>Cash dividend</th><th>Stock dividend</th></tr>
<tr><td rowspan="5">Director</td><td>Douglas T. Hsu</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">15,987</td><td rowspan="8">15,987</td><td rowspan="8">1,297</td><td rowspan="8">1,297</td><td rowspan="8">0.99%</td><td rowspan="8">0.99%</td><td rowspan="8">16,943</td><td rowspan="8">17,063</td><td rowspan="8">0</td><td rowspan="8">0</td><td rowspan="8">1,563</td><td rowspan="8">0</td><td rowspan="8">1,563</td><td rowspan="8">0</td><td rowspan="8">2.05%</td><td rowspan="8">2.05%</td><td rowspan="8">110,967</td></tr>
<tr><td>Representatives of Far Eastern New Century: Johnny Shih, Humphrey Cheng, Kao-Shan Wu Roy Wu</td></tr>
<tr><td>Representatives of Yue Ming Trading Co Ltd: Justin Tsai</td></tr>
<tr><td>Representative of Yu Li Investment Corporation: Paul Chuang</td></tr>
<tr><td>Representative of Fu Da Transport Corporation: Eric Chueh</td></tr>
<tr><td rowspan="3">Independent Director</td><td>C.T. Chan</td></tr>
<tr><td>Walt Cheng</td></tr>
<tr><td>Ping Lih</td></tr>
<tr><td colspan="23">Besides the above disclosure, if any of the Director provided service (as non-employee sort of consultant and the like) with rewarded remuneration to all the listed companies in the financial statement in the last year: NO
Remarks:
1. The professional practice fees listed refer to the sum distributed eventually in 2018; Directors' remuneration and employees bonus allocated were resolved at the Board meeting held on 19 March 2019, and shall be reported to the shareholders' meeting for approval.
2. The Company and all companies in the consolidated financial statement neither issue shares nor issue warrants and options for purchasing common shares to employees as bonus.
3. The Board reelection was held on 8 June 2018, in which the Director, Mr. Chung-Yueh Dai of FENC representative, was discharged and refilled by Mr. Roy Wu, originally representative of Far Eastern Y.Z. Hsu Science & Technology Memorial Foundation, Mr. Paul Chuang, representative of Yu Li Investment Corporation, Mr. Eric Chueh, representative of Fu Da Transport Corporation, and Mrs. Ping Lih are newly appointed.</td></tr>
</table>

Breakdown of remuneration

Breakdown of remuneration of Directors	Name of Director			
	Total (A+B+C+D)		Total (A+B+C+D+E+F+G)	
	the Company	Companies included in the financial statement H	the Company	All investees I
Less than NT$2,000,000	Representatives of Far Eastern New Century: Johnny Shih, Humphrey Cheng, Kao-Shan Wu, Roy Wu Representative of Yue Ming Trading Co Ltd: Justin Tsai Representative of Yu Li Investment Corporation: Paul Chuang Representative of Fu Da Transport Corporation: Eric Chueh C.T. Chan, Walt Cheng, Ping Lih	Representatives of Far Eastern New Century: Johnny Shih, Humphrey Cheng, Kao-Shan Wu, Roy Wu Representative of Yue Ming Trading Co Ltd: Justin Tsai Representative of Yu Li Investment Corporation: Paul Chuang Representative of Fu Da Transport Corporation: Eric Chueh C.T. Chan, Walt Cheng, Ping Lih	Representative of Yu Li Investment Corporation: Paul Chuang Representative of Fu Da Transport Corporation: Eric Chueh C.T. Chan, Walt Cheng, Ping Lih	Representative of Yu Li Investment Corporation: Paul Chuang C.T. Chan, Walt Cheng, Ping Lih
NT$2,000,000 (inclusive)~NT$5,000,000	Douglas T. Hsu	Douglas T. Hsu	Representatives of Far Eastern New Century: Johnny Shih, Humphrey Cheng, Kao-Shan Wu, Roy Wu	
NT$5,000,000 (inclusive)~NT$10,000,000			Douglas T. Hsu Representatives of Yue Ming Trading Co Ltd: Justin Tsai	Representatives of Yue Ming Trading Co Ltd: Justin Tsai Representative of Fu Da Transport Corporation: Eric Chueh
NT$10,000,000 (inclusive)~NT$15,000,000				Representatives of Far Eastern New Century: Johnny Shih, Humphrey Cheng, Kao-Shan Wu, Roy Wu
NT$15,000,000 (inclusive)~NT$30,000,000				
NT$30,000,000 (inclusive)~NT$50,000,000				
NT$50,000,000 (inclusive)~NT$100,000,000				Douglas T. Hsu
NT$100,000,000 above				
Total	11 persons	11 persons	11 persons	11 persons

2.3.2 Remuneration of Supervisors

Currency unit: NTD thousand

Job title	Name	Remuneration of supervisors						The sum of A, B and C in proportion to Earnings		Whether remuneration from any reinvestees other than subsidiaries is received ?
		Remuneration (A)		Retained Earnings Distribution (B)		Professional practice (C)				
		the Company	Companies included in the financial statement	the Company	Companies included in the financial statement	the Company	Companies included in the financial statement	the Company	Companies included in the financial statement	
Supervisor	Representatives of Yu Li Investment Corporation: Paul Chuang Representative of Asia Cement: Eric Chueh, Doris Wu	0	0	0	0	162	162	0.01%	0.01%	10,252

Remarks:

1. The Company and all companies in the consolidated financial statement neither issue shares nor issue warrants and options for purchasing common shares to employees as bonus.
2. After the re-election of the Board of Directors on 8 June 2018, Supervisors of the company, Paul Chuang representing Yu Li Investment Corporation, and Eric Chueh and Doris Wu both representing Asia Cement were officially discharged.

Breakdown of remuneration

Breakdown of remuneration of Supervisor	Supervisor's Name	
	Total (A+B+C)	
	the Company	All investees (D)
Less than NT$2,000,000	Representatives of Yu Li Investment Corporation: Paul Chuang Representatives of Asia Cement: Eric Chueh, Doris Wu	Representatives of Yu Li Investment Corporation: Paul Chuang
NT$2,000,000 (inclusive)~NT$5,000,000		
NT$5,000,000 (inclusive)~NT$10,000,000		Representatives of Asia Cement: Eric Chueh, Doris Wu
NT$10,000,000 (inclusive)~NT$15,000,000		
NT$15,000,000 (inclusive)~NT$30,000,000		
NT$30,000,000 (inclusive)~NT$50,000,000		
NT$50,000,000 (inclusive)~NT$100,000,000		
NT$100,000,000 above		
Total	3 persons	3 persons

2.3.3 Remuneration of President and Vice Presidents

Currency unit: NTD thousand

Job title	Name	Salary (A)		Pension (B)		Salaries, bonus and special subsidies (C)		Employee bonus allocated from earnings (D)				The sum of A, B, C and D in proportion to Earnings (%)		Whether remuneration from any reinvestees other than subsidiaries is received?
		the Company	Companies included in the financial statement	the Company	Companies included in the financial statement	the Company	Companies included in the financial statement	the Company		Companies included in the financial statement		the Company	Companies included in the financial statement	
								Cash dividend	Stock dividend	Cash dividend	Stock dividend			
President	Justin Tsai	13,212	13,332	0	0	4,171	4,171	1,532	0	1,532	0	1.08%	1.09%	27
Vice President	Victoria Peng													
	C.K. Tsai													
	Y.S. Chang													

Remarks:

1.The Company and all companies in the consolidated financial statement neither issue shares nor issue warrants and options for purchasing common shares to employees as bonus.

Breakdown of remuneration

Breakdown of remuneration of President and Vice Presidents	Name of President and Vice Presidents	
	the Company	All investees (E)
Less than NT$2,000,000		
NT$2,000,000 (inclusive)~NT$5,000,000	Victoria Peng, C.K. Tsai, Y.S. Chang	Victoria Peng, C.K. Tsai, Y.S. Chang
NT$5,000,000 (inclusive)~NT$10,000,000	Justin Tsai	Justin Tsai
NT$10,000,000 (inclusive)~NT$15,000,000		
NT$15,000,000 (inclusive)~NT$30,000,000		
NT$30,000,000 (inclusive)~NT$50,000,000		
NT$50,000,000 (inclusive)~NT$100,000,000		
NT$100,000,000 above		
Total	4 persons	4 persons

2.3.4 Employee bonus amount paid to managerial officers

Currency unit: NTD thousand

	Job title (Note 1)	Name (Note 1)	Stock dividend	Cash dividend	Total	Proportion to Earnings After Tax (%)
Managerial officer	President	Justin Tsai	0	3,250	3,250	0.19%
	Vice President of President Office	Victoria Peng				
	Vice President of EOG & GAS Business Group	C.K. Tsai				
	Vice President of Technical & R&D Center	Y.S. Chang				
	Assistant Vice President of Manufacturing Group II and Plant Management Center	Martin Kuo				
	Assistant Vice President of Manufacturing Group I	F.H. Chang				
	Assistant Vice President of SC Business Group (Note2)	Michael Chang				
	Assistant Vice President of Maintenance Dept.	Steven Wu				
	Assistant Vice President of HR & Administration Center (Note3)	Roger Lin				
	Assistant Vice President of Finance Dept.	Judy Wang				
	Assistant Vice President of Accounting Dept. (Note4)	Allen Yu				
	Assistant Vice President of Auditing Dept.	Amy Cheng				
	Special Assistant of President Office	Wen-Fan Lu				

Note 1: The scope of managerial officers shall be defined in the following manner, per the Board's decree under Tai-Tsai-Cheng-3-Tze No. 0920001301 dated March 27, 2003.

Note 2: The originally positioned Assistant Vice President of SC Business Group, Michael Chang, resigned on 1 April 2019.

Note 3: The originally positioned Assistant Vice President of HR & Administration Center, Roger Lin, resigned on 16 September 2018.

Note 4: The originally positioned acting Assistant Vice President of Accounting Department, Allan Yu, became authentic Assistance Vice President starting 1 April 2019.

2.4 Specify and compare the remuneration of Directors, Supervisors, President and Vice Presidents of the Company in proportion to the earnings after tax from the Company and companies included in the consolidated financial statements over the last two years, and specify the policies, standards, combinations, and procedures of decision-making for remuneration and their correlation with business performance and future risk:

2.4.1 Specify and compare the remuneration of Directors, Supervisors, President and Vice Presidents of the Company in proportion to the earnings after tax in the entity or individual financial statement of the Company and companies included in the consolidated financial statements over the last two years:

Item	Total remuneration of Directors, Supervisors, President, and Vice Presidents in proportion to the earnings after tax:	
Year	the Company	Consolidated financial statements
2018	2.80%	2.82%
2017	2.66%	2.67%

2.4.2 The policies, standards, combinations, procedures of decision-making of remunerations and their correlation with business performance and future risk:

Pursuant to the Company Law and the Article 33 of Articles of Incorporation, when there is profit at the end of the year, the Company shall distribute 1%-2% of the profit as remuneration for employees and no more than 1% as remuneration for Directors. However, should there be any accumulated loss, the loss should be offset in advance. The remuneration for employee can be of stock or cash. Its actual proportion, amount, form or number of stock shall be resolved at the Board of Directors' Meeting, with consent of over half of the least two third of total Directors attendant, prior to the Shareholders' Meeting. Same shall be applied to the Directors. The remainder to be distributed may be in accordance with the actual operation status of the Company as well as with references from the associates and past experiences. The remuneration distributed will be subject to the changes in allocation measure, structure and system in view of actual operation status, and to the adjustment according to reenactment of relevant statute mainly according to factors such as job accountability, overall environment, operating risk and market standard.

The remuneration for the Directors will be set pursuant to the "Procedures for the Board Performance Evaluation", in view of the overall operation performance, future management risks and development of the Company, as well as individual performance achievement and contribution to the Company, then submitted to the Remuneration Committee for the relevant performance assessment and justness evaluation prior to the Board Meeting for approval. To keep balance of the sustainability and risk management of the Company, the remuneration system shall be reviewed at any time in accordance with the status quo of operation and the relevant statute.

3. Implementation of Corporate Governance

3.1 Operations of Board of Directors

The Board held five meetings during the recent year. The attendance record of Directors is listed below:

Job title	Name (Note 1)	Actual attendance (participation)	Attendance by proxy	Actual attendance (participation) (%) (Note 2)	Remark
Chairman of the Board	Douglas T. Hsu	5	0	100%	Reelected. Date of reelection: 2018/6/8
Vice Chairman of the Board	Representative of Far Eastern New Century: Johnny Shih	5	0	100%	Reelected. Date of reelection: 2018/6/8
Director	Representative of Far Eastern New Century: Humphrey Cheng	4	1	80%	Reelected. Date of reelection: 2018/6/8
Director	Representative of Far Eastern New Century: Kao-Shan Wu	5	0	100%	Reelected. Date of reelection: 2018/6/8
Director	Representative of Far Eastern New Century: Roy Wu	5	0	100%	Reelected. Date of reelection: 2018/6/8
Director	Representative of Far Eastern New Century: Chung-Yueh Dai	2	0	100%	Discharged. Date of discharge: 2018/6/8
Director	Representative of Yue Ming Trading Co Ltd: Justin Tsai	5	0	100%	Reelected. Date of reelection: 2018/6/8
Director	Representative of Yu Li Investment Co Ltd.: Paul Chuang	3	0	100%	Elected. Date of election: 2018/6/8
Director	Representative of Fu Da Transportation Corporation: Eric Chueh	3	0	100%	Elected. Date of election: 2018/6/8
Independent Director	C.T. Chan	5	0	100%	Reelected. Date of reelection: 2018/6/8
Independent Director	Walt Cheng	4	1	80%	Reelected. Date of reelection: 2018/6/8
Independent Director	Ping Lih	3	0	100%	Elected. Date of election: 2018/6/8

Other items to be specified:

(1) Should one of the following occur, the meeting date, period, content of the resolution, opinions of all Independent Directors, and the Company’s handling of the opinions of the Independent Directors shall be clearly stated:

i. All the listed items in Article 14-3 of the Securities and Exchange Act: please refer to the Board resolution on p50-p52

ii. In addition to the aforementioned, the items in board resolutions regarding which Independent Directors have voiced opposing or qualified opinions on the record or in writing: The Independent Directors voiced no opposing or qualified opinions on any of the Board’s resolutions.

(2) In instances where a Director’s circumvention due to the conflict of interest, the minutes shall clearly state the Director's name, contents of the motion and resolution thereof, reason for such circumvention and the voting status:

Director Humphrey Cheng, who assumed concurrently as Chairman and President of Tong Fu Investment Corporation, circumvented during the discussion and resolution of the proposed disposition of acquisition common shares of Tong Fu Investment Corporation of total amount NTD250,000,000 in the Board Meeting held at 8 November 2018.

(3) Measures undertaken during the current year and past year (including the establishment of the Audit Committee, improvement of info transparency, etc.) in order to strengthen the functions of the Board of Directors and assessment of such implementation: The important Board resolutions were notified at the Company's website, and Directors liability insurance were implemented, to improve its information transparency and secure shareholders' equity, as well as the establishment of the Audit Committee for the supervision of Board's execution.

(4) The attendance record of the Independent Directors in 2018 and till the printing date of this annual report:

Board session date	2018/3/19	2018/4/24	2018/6/8	2018/8/7	2018/11/8	2019/3/19	2019/5/9
C.T. Chan	V	V	V	V	V	V	V
Walt Cheng	V		V	V	V	V	V
Ping Lih	NA	NA	V	V	V	V	V

Note: ' V ' represents attendance

Note 1:For a Director who is a corporation, please specify the corporate shareholder's name and its representative's name.

Note 2:(a)Where a specific Director may be relieved from duties before the end of the fiscal year, please specify their date of discharge in the 'Remarks" Section. Their actual attendance rate (%) to the Board session shall be calculated on the basis of the number of meetings called and actual number of sessions he/she attended, during his/her term of office.

(b)Where an election may be held for filling the vacancies of Director before the end of the fiscal year, please list out both the new and the discharged Directors and specify the new, the discharged and the reelected Directors and the election date in the 'Remarks' Section. Their actual attendance rate(%) of Board meetings shall be calculated on the basis of the number of meetings called and actual number of sessions he/she attended, during his/her term of office.

3.2 Operations of the Audit Committee or the Supervisors participation on the Board of Directors

1. The participation of Supervisors in the activities of the Board of Directors

   The Board of the 14th term held two meetings in the recent year. The attendance record of Supervisors is listed below:

Job title	Name	Actual attendance	Actual attendance rate (%) (Note)	Remark
Supervisor	Representative of Yu Li Investment Corporation: Paul Chuang	2	100%	Discharged. Date of discharge: 2018/6/8
Supervisor	Representative of Asia Cement: Eric Chueh	2	100%	Discharged. Date of discharge: 2018/6/8
Supervisor	Representative of Asia Cement : Doris Wu	2	100%	Discharged. Date of discharge: 2018/6/8

Other items to be specified:

1. The structure of Supervisors and their duties:
   (1) Communications between the Supervisors and the employees and shareholders: The Company's employees and shareholders may communicate with Supervisors at any time.
   (2) Communication between Supervisors and internal audit officers and CPAs: The audit officers will submit an audit report to the Supervisors in the month following completion of the audit. The Company will also hold a Supervisors' meeting periodically to enable the relevant officers, internal audit officers and CPA to report fairly and openly discuss the Company's finance and business, and the communication has been good.
2. If a Supervisor, attending a meeting of the Board of Directors, states an opinion, it is necessary for the date, session, motion and resolution of the meeting of the Board of Directors be specified, and the Company's response to the opinion of the Supervisor must be stated accordingly: N/A

Note:

(1) Where a Supervisor may be relieved of their duties before the end of the fiscal year, please specify the date of discharge in the 'Remarks" Section. Their actual Board session attendance rate (%) shall be calculated on the basis of the actual number of sessions he/she attended, during his/her term of office.

(2) Where an election has been held to fill a Supervisor vacancy before the end of the fiscal year, please list both the new and the discharged Supervisors and specify if this the former Supervisor, or a newly or reelected one, as well as the date of the election. The Supervisor's attendance rate (%) of Board sessions shall be calculated on the basis of the actual number of sessions they attended during their term of office.

2. The Audit Committee of the Company, which was consisted of all the Independent Directors, was established at 8 June 2018. The main function of the Audit Committee is to assist the Board with the formulation or amendment of the Company's internal control system and important disposition procedures in regard to the stakeholder related issues concerning the Directors, major assets transactions, loans of funds, endorsements and guarantees, offering issuance or private placement of equity-type securities, hiring/dismissal of a certified public accountant or their compensation, the appointment/discharge of a financial, accounting or internal audit officer, as well as annual financial reports, etc.

   The major issues in regard to the four Audit Committee meetings summoned lately included the following:

   (1) The Company's proposal for acquisition or disposition of assets
   (2) The Company's proposal on credit line agreements with the financial institutes
   (3) The Company's guarantee proposal on the reinvestee's credit line with the financial institutes
   (4) The review of the Company's 2018 financial report
   (5) The Company's proposal for 2018 profits allocation
   (6) The review of the Company's 2018 business report
   (7) The review of the Company's Internal Control System Declaration

   The Audit Committee held four meetings in the recent year. The attendance record of Independent Directors is listed below:

Job title	Name	Actual attendance	Actual attendance rate (%) (Note)	Remark
Convener	Walt Cheng	4	100%	The establishment date of the Audit Committee: 2018/6/8
Member	C. T. Chan	4	100%	
Member	Ping Lih	4	100%	

Other items to be specified:

1. (1) All the listed items below are pursuant to the Article 14-5 of the Securities & Exchange Act.

   (2) Any other item which was not approved by the Audit Committee, yet resolved by two thirds of the Board of Directors, it is necessary for the date, session, motion of the Board meeting, and the resolution result of the Audit Committee as well as the Company's response to the opinion of the Audit Committee be specifically stated : N/A

Term of the Audit Committee Meeting	Major resolution & follow-up action	Items regarding Article 14-5 of Securities & Exchange Act	Audit Committee's resolution results and the Company's opinion on the follow-up
1st meeting of 1st term 2018.8.6	1.Approval of the acquisition and disposition of the Company's Assets 2.Approval of the Company's proposal on credit line agreements with the financial institutes 3.Approval of the Company's guarantee proposal on the reinvestee's credit line with the financial institutes 4.Approval of the Company's proposal on customer's credit line control 5.Approval of the Company's consolidated financial report H1/2018 6.Approval of the Company's Q2/2018 Auditing report Independent Directors' opinion: None	V V V V V V	The proposals were passed unanimously by the Audit Committee, and reported to the Board of Directors and approved unanimously.
2nd meeting of 1st term 2018.11.2	1. Approval of the Company's consolidated financial report Q3/2018 2. Approval of amendment to the "Procedures for Acquisition and Disposition of Assets" of the Company	 V	

Term of the Audit Committee Meeting	Major resolution & follow-up action	Items regarding Article 14-5 of Securities & Exchange Act	Audit Committee's resolution results and the Company's opinion on the follow-up
	3.Approval of the Company's proposal on credit line agreements with the financial institutes 4.Approval of the Company's guarantee proposal on the reinvestee's credit line with the financial institutes 5.Approval of amendment to "Procedures for Capital Lending to Others" and "Procedures for Endorsement and Guarantee" of the subsidiaries during Oct. 2017 to Sep. 2018 6.Approval of the Company's jointly participation in capital Lending of NTD250 million to Tong Fu Investment Corporation 7.Approval of the Company's Q3/2018 Auditing report 8.Approval of the Company's 2019 internal audit plan 9.Approval of the amendment to the Company's internal control system (incl. internal auditing implementation bylaw) Independent Directors' opinion: None	V V V V V V V	The proposals were passed unanimously by the Audit Committee, and reported to the Board of Directors and approved unanimously.
3rd meeting of 1st term 2019.3.18	1. Approval of the acquisition and disposition of the Company's Assets 2.Approval of the Company's proposal on credit line agreements with the financial institutes 3.Approval of the Company's guarantee proposal on the reinvestee's credit line with the financial institutes 4.Approval of the Company's 2018 financial report 5.Approval of the Company's 2018 profits allocation 6.Approval of the Company's 2018 business report 7.Approval of the Company's Q4/2018 auditing report 8.Approval of the Company's 2018 Internal Control System Declaration 9.Approval of the amendment to "Procedures for Acquisition and Disposal of Assets" of the Company 10. Approval of the amendment to "Procedures for Capital Lending to Others" and "Procedures for Endorsements and Guarantees" of the Company Independent Directors' opinion: None	V V V V V V V V V V	
4th meeting of 1st term 2019.5.8	1. Approval of the Company's consolidated financial report Q1/2019 2. Approval of the acquisition and disposition of the Company's Assets 3.Approval of the Company's proposal on credit line agreements with the financial institutes 4.Approval of the Company's guarantee proposal on the reinvestee's credit line with the financial institutes 5. Approval of the Company's jointly participation in capital Lending of NTD273,011,200 to Oriental Petrochemical (Taiwan) Co., Ltd. 6.Approval of the Company's periodical assessment on the CPAs' independence and competence	 V V V V	

Term of the Audit Committee Meeting	Major resolution & follow-up action	Items regarding Article 14-5 of Securities & Exchange Act	Audit Committee's resolution results and the Company's opinion on the follow-up
	7.Approval of the Company's Q1/2019 auditing report Independent Directors' opinion: None	V	

2. In instances where an Independent Director's circumvention due to the conflict of interest, the minutes shall clearly state the Independent Director's name, contents of the motion and resolution thereof, reason for such circumvention and the voting status: N/A
3. Communication between Independent Directors and internal audit officers and CPAs: (e.g. the items, methods and results of the discussion regarding the company's financial and business status)
   (1) Besides the audit report submitted from the audit officer to the Independent Directors in the month following completion of the audit. The Independent Directors will also hold an Audit Committee meeting quarterly in which the audit officer will report on the auditing execution and the important internal audit issues for the meeting organizing unit to put into the meeting minutes.
   (2) The CPAs of the Company presented at the Audit Committee meeting the audit results of the quarterly financial report, and delivered the relevant requests commanded by law. An instant report shall be submitted to the Audit Committee on account of any unusual occurrence. The Audit Committee and the CPAs had good communication in 2018, with none of the unusual aforementioned occurred.

Term of the Audit Committee Meeting	Communication status with the auditing officer	Communication status with the CPAs
1st meeting of 1st term 2018.8.6	The Company's Q2/2018 auditing report	The audit report of the Company's H1/2018 financial report
2nd meeting of 1st term 2018.11.2	The Company's Q3/2018 auditing report The Company's 2019 Internal Auditing Plan The Company's amendment to the internal audit system	The audit report of the Company's Q3/2018 financial report
3rd meeting of 1st term 2019.3.18	The Company's Q4/2018 auditing report The Company's 2018 Internal Control System Declaration	The audit report of the Company's 2018 financial report Communication and statement on key auditing items
4th meeting of 1st term 2019.5.8	The Company's Q1/2019 auditing report	The audit report of the Company's Q1/2019 financial report

3.3 Corporate Governance Execution Results and Deviations from "Corporate Governance Best-Practice Principles for TWSE / GTSM Listed Companies"

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
1. Has the Company formulated and disclosed its own corporate governance best-practice principles in accordance with "Corporate Governance Best-Practice Principles for TWSE-GTSM Listed Companies"?	V		The Company has formulated "Corporate Governance Principles", and reviewed regularly to strengthen its system and structure. The same has also been disclosed through the Company's website accordingly.	None
2. Shareholding Structure & Shareholders' Rights (1) Has the Company established internal operating procedures to handle shareholder proposals, doubts, disputes, and litigation-related issues, and practically implemented such procedures? (2) Has the Company kept the lists of its major shareholders and the ultimate owners of such major shareholders? (3) Has the Company established risks control and firewall mechanism with its affiliates? (4) Has the Company established the internal rules to prohibit its insiders from trading securities by using info not yet disclosed to the market?	V V V V		(1) The Company has established communication channels with the investors through its website (http://www.oucc.com.tw/index.asp), and dedicated spokesman and IR representative to respond to shareholders proposals, questions and to provide business consultations at all time. (2) The Company's Financial Dept. holds, at all time, the lists of its major shareholders and such ultimate owners, and reports for the info update pursuant to regulation of the listed companies. (3) The operating management and financial operation between the Company and its affiliates run independently, and are carried out in accordance with " Regulations Governing Transactions With Related Parties", "Procedures for Acquisition or Disposition of Assets", "Procedures for Capital Lending to Others" and " Procedures for Endorsements/Guarantees". Adequate risks control and firewall mechanism have been established. (4) The Company has posted on its website the "Procedures for Internal Material Information Handling", prohibiting its insiders from trading securities by using undisclosed info, as well as "Codes of Ethics" and "Best Practice Principles" established to guide and constrain the conducts of its employees, and advocates and applies such concepts to its day-to-day operation. New recruit needs to sign a NDA when reports to work.	None

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
3. Composition and Responsibilities of the Board of Directors (1) Have the Board members formulated diverse policies and implemented them accordingly?	V		(1) The Company has established the candidate nomination system according to its corporate governance principles to assess the candidate's academic and professional experiences in terms of the Board member nomination and selection, and follows the "Procedures for the Board Election" and "Corporate Governance Principles" to ensure the diversity, independence of the Board member and the opinions of the stakeholders will be taken into account. The Company's Board members of the 15th term have been seasoned in business management, strategic leadership and industry related knowledge. Some of the members are experienced in law, economy and marketing, etc. Please refer to Note 1 for details of the diverse policies.	None
(2) In addition to Remuneration Committee and Audit Committee, has the Company established any other types of functional committee?	V		(2) The Company has established Remuneration Committee, and Audit Committee as stipulated, besides the Vocational Safety & Health Committee.	
(3) Has the Company established Board performance assessment method and has the performance evaluated annually?	V		(3) The Company has formulated the assessment method for the Board performance and had it approved at the 6 March 2017 Board meeting and notified on the Company's website. Periodical evaluation meeting conducted by Board members and the Board meeting organizing unit will be held annually by way of self-appraisal, following the five aspects: participation of the company's business operation, enhancement of the Board's decision-making, Board's composition and structure, Directors' appointment and continued training, and internal control, etc. The assessment result of the Board performance in 2018 has been "Outstanding", which result was reported to the Remuneration Committee meeting held at 18 March 2019.	

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
(4) Has the Company evaluated the independence of CPAs on a regular basis?	V		(4) The Company's Board has evaluated the independence and competence of the CPAs at least once annually based on the scale of the public accounting firm and experiences & qualifications of the CPAs, as well as consecutive years of their service as auditors, their independence with the Company's finance, whether or not their independence principles intact, and work performance and plans, which information or statement provided by the CPAs or their firm were evaluated and approved by the Board meeting held on 9 May 2019. Please refer to Note 2 for evaluation details.	None
4. Has the Company established a fully dedicated or concurrent unit or personnel in charge of the corporate governance related business, which includes but not limited to the provision of Directors and Supervisors' execution info, the proceeding of Board and Shareholders' meetings and the related pursuant to the regulation, corporate registry and change, the producing of the Board and Shareholders' meetings minutes, and so on?	V		The President office of the Company is a concurrent unit for corporate governance, the in charge officer has at least 3-year experiences in administration, shareholder affairs and meeting related management, as well as supervise the President office, Administration management, finance, accounting, SHE, production, and technology departments in regard to corporate governance related affairs and the implementation in terms of the best business practice, corporate social responsibility, law compliance, meeting rules and public information, etc. The corporate governance implementation in 2018 included: (1) The Board meeting and the related: 5 times (2) The Audit Committee meeting and the related: 2 times (3) The Remuneration Committee meeting and the related: 2 times (4) Arrangement for Directors continued training course: 11 persons & 69 hours in total (5) Submission of CSR report.	None
5. Has the Company established a communication channel for the stakeholders (including but not limited to the shareholders, employees, clients and suppliers, etc.), a company website dedicated to stakeholders, and responded appropriately to the social responsibility issues which are critical to stakeholders?	V		The Company has delegated a spokesman, acting spokesman, investor relations, and a company stock service agent, and also assigned a CSR section on the company website (http://www.oucc.com.tw/tw/green.asp) with a questionnaire and a contact email address to be responded by the designated personnel of the IR.	None

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
6. Has the Company commissioned a professional stock agent to handle shareholders affair?	V		The Company has commissioned a professional stock agent Oriental Securities Corporation to handle shareholders affairs.	None
7. Information Disclosure (1) Has the Company established a website for info disclosure on financial, business and corporate governance? (2) Has the Company also adopted other disclosure measures such as English website, dedicated personnel for collecting & disclosing of company info, implemented spokesman system, and uploaded the institutional investor conference presentations on the Company's website?	V V		(1) The Company has established a website (http://www.oucc.com.tw) for info disclosure on financial, business, corporate governance, and other important info. (2) The Company has established a English website (http://www.oucc.com.tw/eng/index.asp), had dedicated personnel in charge of info collecting and disclosing of finance, business, institutional investor conference and the related, as well as implemented spokesman system by delegating spokesman, acting spokesman, and investor relations.	None
8. Does the Company have other critical information which can help others to understand the implementation of corporate governance (including but not limited to, employee welfare, staff care, investor relations, supplier relations, stakeholder rights, Director training status, risk management policies and risk measurement standard implementation progress, customer policy implementation progress, and the Company's purchase of liability insurance for Directors)?	V		For further comprehension of the corporate governance operation of the Company and its subsidiaries, please refer to *3.8 Other information enabling a better understanding of Company corporate governance* on p43-p47.	None
9. Please state the improvement status quo of the latest Corporate Governance Evaluation results announced by the Corporate Governance Center of TWSE, and the prioritized items and measures to be adopted: The improved items regarding to the Company's Corporate Governance Evaluation result are as follows: (1) Completed the formulation of the "Procedures for Handling Material Inside Info" and notified on the Company's website. (2) The implementation of the Board's diversification policy has been disclosed in the Company's annual report and on the website. (3) The Company's Board performance assessment result and the communication status of the Independent Directors, Internal Auditing and CPAs were disclosed on the Company's website. (4) Completed by the end of June 2019 the implementation of the Company's Remuneration Committee with Independent Directors consisting in majority to enhance the corporate governance.				

Note 1:

According to the Chapter III of the Company's Corporate Governance Principles, the composition of the Board members should be diversified, and shall have the necessary knowledge, skill, and experience for performing their duties. To achieve the ideal goal, the Board of Directors shall have the abilities to make operational judgment, perform accounting and financial analysis, conduct management in administration and crisis, as well as leadership in decision making, industrial knowledge and international market perspective.

The Company's Board is composed of 11 Directors, including 3 Independent Directors. All the Board members are diversified and experienced in the professions of operation, legal, and accounting and so on, which are listed per below:

The implementation of the Board's diversification policy:

Name	Gender	Independent Directors Length of Tenure		Professional Knowledge & Skill			Diversified Core Strength							
		Under 3 years	3 to 6 years	Professional Background	Professional Qualification	Chemical Engineering Experience	Operation Judgement	Management	Finance & Accounting	Commerce & Economy	Crisis Management	Industrial Knowledge	International Perspective	Decision- making Leadership
Douglas T Hsu	Male			Operation		V	V	V	V	V	V	V	V	V
Johnny Shih	Male			Operation		V	V	V	V	V	V	V	V	V
Humphrey Cheng	Male			Operation	Law	V	V	V	V	V	V	V	V	V
Kao-Shan Wu	Male			Operation		V	V	V	V	V	V	V	V	V
Roy Wu	Male			Chemical		V	V	V	V	V	V	V	V	V
Justin Tsai	Male			Operation		V	V	V	V	V	V	V	V	V
Paul Chuang	Male			Operation		V	V	V	V	V	V	V	V	V
Eric Chueh	Male			Operation		V	V	V	V	V	V	V	V	V
C. T. Chan	Male		V	Operation		V	V	V	V	V	V	V	V	V
Walt Cheng	Male		V	Operation		V	V	V	V	V	V	V	V	V
Ping Lih	Female	V		Accounting	Accountant		V	V	V	V	V	V	V	V

Note 2: Evaluation standard of CPAs independence (in accordance with the Norm of CPAs Professional Ethics)

Evaluation Items	Evaluation Result	Whether to meet w / independence (yes or no)
1. Whether or not the CPAs have direct or critical indirect financial interest related to the Company.	No	Yes
2. Whether or not the CPAs conduct financing or guarantee behavior with the Board of the Company.	No	Yes
3. Whether or not the CPAs are in close business relationships and potential employment relationships with the Company.	No	Yes
4. Have the CPAs and Audit Committee members assumed currently or within the latest 2 years as Directors, managerial officers or other position of the Company, which have great effect on the auditing function?	No	Yes
5. Have the CPAs provided the Company with any non-auditing services which may have direct impact on the auditing function?	No	Yes
6. Have the CPAs involved as an intermediary of the stocks issued by the Company or other securities company?	No	Yes
7. Have the CPAs conducted as defenders or representatives of the Company negotiating the conflicts with the third party?	No	Yes
8. Have the CPAs been in kinships with the Directors, managerial officers, or other personnel of the Company who have great influences on the auditing proposals?	No	Yes

3.4 Establishment, functions, and operations of the Remuneration Committee:

3.4.1 Members of the Remuneration Committee

ID	Requirements / Name	Over five years of experience and the following professional qualifications			Independence criteria (Note 1)								Number of other public companies where the person holds the title as Remuneration Committee member	Remark
		University teaching in areas of commerce, law, finance, accounting or related corporate business	Working as a judge, attorney, lawyer, accountant or other positions that require professional certification	Work experience in commerce, law, finance, accounting or related corporate experiences	1	2	3	4	5	6	7	8		
Independent Director	C. T. Chan			√	√	√	√	√	√		√	√	0	
Others	J. W. Huang			√	√	√	√	√	√	√	√	√	2	
Others	Lucia Tung		√	√	√	√	√	√	√	√	√	√	2	

Note 1: A "√" is marked in the space beneath a condition number when a member has met that condition during the two years prior to election and during his or her period of service. The conditions are as follows:
(1) Not employed by the Company or any of the Company's affiliates.
(2) Not a Director or Supervisor of the Company or any of the Company's affiliates. This restriction does not apply to Independent Directors of subsidiaries in which the Company or its parent company directly or indirectly holds over 50% of the shareholder voting rights.
(3) Not holding over 1% of company shares or being a top 10 natural person shareholder in one's own name, held by a spouse or underage child, or held by nominee agreement.
(4) Not a spouse, kin at the second pillar under the Civil Code, or the lineal blood relatives within the third pillar under the Civil Code as specified in (1) through (3).
(5) Not a Director, Supervisor or employee of a corporate shareholder who holds more than 5% of the outstanding shares issued by the Company, or a Director, Supervisor or employee of a corporate shareholder who is among the top 5 shareholders.
(6) Not a Director, Supervisor, Manager or shareholder holding more than 5% of the outstanding shares of specific company or institution in business or financial relation with the Company.
(7) Not a professional, owner, partner, Director, Supervisor, manager of proprietorship, partnership, company or institution that provide business, legal, financial and accounting services to the Company or its affiliates or a spouse to the aforementioned persons.
(8) Not under any of the categories stated in Article 30 of the Company Law.

3.4.2 Operations of the Remuneration Committee

(1) The Company's Remuneration Committee consists of 3 members.
(2) Current term of office: August 7, 2018~June 7, 2021. The Committee held 2 (A) meetings in the recent year and the attendance of the Committee members is summarized as follows:

Job title	Name	Actual attendance (B)	Attendance by proxy	Actual attendance rate (%) (B/A)	Remark
Convener	C. T. Chan	2	0	100%	
Member	J. W. Huang	2	0	100%	
Member	Lucia Tung	2	0	100%	

Other notes:
1. If the Board of Directors does not adopt, or amends, the Remuneration Committee's suggestions, please specify the meeting date, term, contents of motion, resolution of the Board of Directors, and the Company's handling of the Remuneration Committee's opinions (If the remuneration ratified by the Board of Directors is superior than that suggested by the Remuneration Committee, please specify the deviation and reasons thereof): N/A
2. For resolution(s) made by the Remuneration Committee with the Committee members voicing opposing or qualified opinions on the record or in writing, please state the meeting date, term, contents of motion, opinions of all members and the Company's handling of the said opinions: N/A

(3) The proposals and resolutions of the Remuneration Committee meetings in 2018

Term of the Remuneration Committee Meeting	Major resolution & follow-up action	Remuneration Committee's resolution results and the Company's opinion on the follow-up
6th meeting of 3rd term 2018.3.13	1. Approval of the implementation report of the 2018 Board performance evaluation of the Company 2. Approval of the Company's proposal on the Board of Directors and Supervisors remuneration and employees compensation	The proposals were passed unanimously by the Remuneration Committee, and reported to the Board of Directors and approved unanimously.
1st meeting of 4th term 2018.12.17	1. Approval of the 2018 remuneration of Board of Directors and Management of the Company in comparison with petrochemical industry associates 2. Approval of the Company's 2018 performance appraisal report for payroll adjustment	

3.5 Implementation of Corporate Social Responsibility

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
1. Promote the implementation of corporate governance				None
(1) Has the Company established a CSR policy and assessed the effectiveness of its implementation?	V		(1) The Company has formulated its CSR policy and compiles its CSR report annually to implement its corporate social responsibility policy.	
(2) Does the Company hold such relevant educational training regularly?	V		(2) The Company holds regularly its CSR educational training, sends its staff to attend relevant program and also holds promoting activities from time to time via its HR & Administration Center.	
(3) Has the Company established a full-time or part-time CSR promoting unit, and had the Board to authorize the in-charge top management for update report?	V		(3) The Company has established its dedicated CSR unit, with President as Chief Commissioner, HR & Administration Center as Secretariat, to push each department to set its annual goal and tasks according to individual accountability, and report to the Board of its implementing status.	
(4) Has the Company established a reasonable remuneration policy, which incorporates employee performance appraisal system into its CSR policy, and set up explicitly an effective reward and discipline system?	V		(4) The Company has set explicit standards to the remuneration, employee performance appraisal, training, and reward and discipline, which are enclosed in the Company's CSR policy and its CSR report.	

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
2. Development of a sustainable environment (1) Has the Company been striving to reinforce its resource usage effectiveness, reduce its environmental impact and improve its use of recyclable materials? (2) Has the Company established an environmental management system appropriate to the characteristics of its industry? (3) Has the Company been mindful of the impact of climate change on its operations, as well as implemented GHG inventory, and developed a strategy to reduce the emission of carbon and other greenhouse gas?	V V V		(1) The Company has accomplished its Ethylene Recycle System, to raise the production efficiency and reduce raw material consumption rate. The Company also invested in the recycle of its waste water & exhaust gas, targeting the recycle of 70% of the waste water and 90% of the CO2 produced. (2) According to its industry characteristics, the Company has formulated the complete SHE measures, and fulfilled the "OHSAS-18001 Occupational Safety Management System" and "ISO-14001 Environmental Protection Management System" by means of 'prioritized safety, clean production, continued improvement and unanimous participation'. (3) The Company's goal in annual average energy saving & carbon reduction targets at 1% power saving rate, an accumulation of 5% within five years. The annual average GHG emission reduction goal, based on the GHG inventory of 2015, targets at 1%, an accumulation of 5% (approx. 16 thousand tons) by 2020. The SHE dept. has been promoting the energy saving and carbon emission reduction measures, and reviewed the implementing result of the GHS inventory ever since.	None
3. Social public welfare (1) Has the Company formulated management policies and procedures according to the related laws and int'l covenants on human rights?	V		(1) The Company has established the stipulated measures for labor relations, to secure the labor rights and safeguard the basic human rights pursuant to the labor laws and regulations, and supported and complied voluntarily with the int'l covenants on human rights treaties, including the Universal Declaration of Human Rights (UDHR), the United Nations Global Compact (UNGC), the United Nations Guiding Principles on Business and Human Rights and the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, so to eliminate any acts that may infringe or violate the human rights and enhance the human rights awareness of the internal personnel and the stakeholders.	None

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
(2) Has the Company established employee grievance mechanisms and channels, and handled such grievances appropriately?	V		(2) The Company has set up the employee grievance mechanisms, and handled such grievances with appropriateness and secrecy.	None
(3) Has the Company provided its employees with a safe and healthy work environment, and regularly implemented employee safety and health education?	V		(3) In order to ensure employee safety and health effectively, the Company has set up fire protection measures, as well as a clinic on factory premises with contracted physicians, professional nursing staff and equipment. A health examination for employees is conducted each year.	
(4) Has the Company established the mechanism for periodic communication with employees, to announce the status quo of circumstances which might materially affect the operation?	V		(4) The Company communicates with its personnel via internal announcements and through periodic formal and informal management meetings to share the knowledge of changes in Company operations in a timely manner.	
(5) Has the Company developed an effective career planning and training program for its employees?	V		(5) The Company has developed a complete training program for its employees according to the demand of each position.	
(6) Has the Company established consumer rights protection policies and complaint-filling procedures in terms of R&D, purchase, production, operation and customer services?	V		(6) The Company values clients' recommendations, and collects feedback from clients via questionnaire held on a regular basis, or via designated email box on its website, which provides instant messages and major news of the Company.	
(7) Has the Company abode by the relevant regulations and int'l guidance in terms of the marketing and instruction of its products and services?	V		(7) The Company has set up its products and services related regulations pursuant to relevant stipulations and int'l guidance.	
(8) Does the Company assess the supplier's previous record of impacts on environment and society prior to business dealing?	V		(8) The Company conducts supplier assessment pursuant to its supplier management procedures.	
(9) Do the Company's contracts with its primary suppliers contain any immediate termination or cancellation clauses when suppliers violate their corporate social responsibility policies, and pose a significant impact on the environment and society?	V		(9) The Company's suppliers have to comply with the ethical conduct of the petrochemical industry and commit to meet the SHE policy of the Company by signing the letter of undertaking. Any incompliance or violation will lead to rectification, fine or cancellation of contract.	

<table>
<tr><th rowspan="2">Item</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from ”Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies” and reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary</th></tr>
<tr><td>4. Reinforcement of information disclosure
(1) Has the Company disclosed the relevant and reliable information in regard to the corporate social responsibility through its official website or the market observation post system?</td><td>V</td><td></td><td>(1) The Company has complied with information disclosure requirements by setting up an official website (http://www.oucc.com.tw/tw/index.asp) where information about finance, business and corporate governance and related information is made available to the public. The Company also communicates with its stakeholders and investors through traditional channels and conferences.</td><td>None</td></tr>
<tr><td colspan="5">5. If the Company has established its corporate social responsibility best-practice principles in accordance with the Corporate Social Responsibility Best-Practice Principles for TWSE/GTSM Listed Companies, please clearly describe the functioning of such principles and any discrepancies:
The Company has formulated its CSR policies since 2014, and fulfilled its corporate social responsibility to advance the development in economy, society, environmental balance and sustainability through its efforts in the green products development, the ego-friendly certifications awarded for environmental protection, and participation in the social public welfare activities.</td></tr>
<tr><td colspan="5">6. Other important information to facilitate a better understanding of the Company’s corporate social responsibility practices (such as systems and measures that the Company has adopted with respect to environmental protection, community participation, contribution and service to society, social and public welfares, consumer rights and interests, human rights, safety and health, and other corporate social responsibilities and activities, and the status of implementation):
(1) The working environment and employee's personal safety protection measures:
a) To prevent occupational disasters and ensure employee safety, the Company has established "contingency plans", performs practice drills, and can take rapid and systematic measures against fire, leakage, typhoon, earthquake, war, traffic accidents, reporting, as well as for evacuation and recovery, to mitigate injury and loss as much as possible.
b) All the substance safety data sheets for raw materials, supplies and products are available throughout the premises, and are also accessible to personnel on intranet to help them take any necessary corrective action and ensure their personal safety as well as that of the factory.
c) The production process zones are equipped with fire protection equipment such as automatic sprinkler systems which may be automatic, manual or remote controlled, to ensure personal safety as well as that of the factory.
d) Monitoring stations for combustible gas, EO, NH_3, H_2, and waste water (COD, pH) are installed within the production areas, so that any leakage or abnormal situation may be detected and remedied/ eliminated immediately.
e) Established procedures for hot/hazardous work, and confined space entrance to ensure the safety of personnel and equipment.
f) Implement contractor's safety training and requirements according to employee safety criteria to ensure the safety of personnel accessing the factory.
g) Organize health examination for employees to detect health problems as early as possible and take prompt action to protect employee health.</td></tr>
</table>

(2) S.H.E policy

The Company obtained authentication of ISO-14001 in 1999, and regained in 2018, whereas OHSAS-18001 obtained in 2002, regained in 2017. Oriental Petrochemical (Yangzhou) Corporation, Far Eastern Union Petrochemical (Yangzhou) Ltd and Tong Da Gas Industries (Yangzhou) Ltd have completed the contingency plan proposal for abrupt occurrence of environmental incidents and safe production; and, obtained authentications of ISO-9001, ISO-14001, OHSAS-18001 from IMS in 2018. All three of them gained the permits for waste water discharge in 2016 and 2017, which permits will be reapplied in 2019 as a mandate of the government. The Yangzhou plants have received in a consecutive period of 3 years the First Level Award for corporate safety within the industrial park, examined and appraised by the Security Surveillance Bureau of the Yangzhou Chemical Industrial Park.

In 2018, the Linyuan Plant has accumulated a safety record of "3.69 million man-hours without an accident". OUCC reviews S.H.E with the highest standards: "zero accidents, zero injuries and zero pollution", to protect the ecological environment and the safety and health of employees, as well as maximizing the benefits for employees, vendors, contractors, customers, shareholders and the general public, and to achieve the vision of sustainability.

(3) S.H.E principles

a) All employees shall take the responsibility to ensure a safe, healthy and environmentally protective environment.
b) Injuries and occupational disease are to be avoided.
c) All levels of supervisors are obliged to continue training employees in work safety.
d) Employees are the most important company asset and so safety is of vital necessity.
e) All deficiencies shall be corrected promptly.
f) Avoidance of injury is a major employee contribution to the Company.
g) Contractors' safety and management is as important as that of the employees.
h) Employees safety outside the Company and factory shall be taken as another high priority.
i) The Company is obliged to continue improving clean production and being a good neighbor in the community.

(4) Community participation, social service and social public welfare

The total amount of donation to the disadvantaged public welfare group in 2018 exceeded NTD5.86M, including a subtotal of NTD1.6M sponsored for the community activities.

a) The Company takes its responsibility and obligations as a member of the Taiwan Responsible Care Association very seriously and participates in regular training and other activities.
b) As a member of the Industrial Safety and Health Association of the ROC and TIGA, the Company shares ideas and experience in the promotion of S.H.E. with other members from time to time.
c) The Company subscribes to the good-neighbor fund run jointly by several Linyuan Factories each year and sponsors local celebrations over the Lunar New Year holidays, dragon boat and moon festivals, and other social activities (including environmental protection, economic construction and cultural observation).
d) As usual the Yangzhou plants establish mutual trust and neighborly relationships with Wanbor community at Yizheng, by means of visiting the lonely elders, sponsoring the students in poverty and leukemia remedy for the children of the community in 2018. Moreover, the activities such as the Enterprise Open Day, Summer Camp for Safety & Fire-Fighting Training held for employees, community public and young children, and the World Environment Day were also organized.

7. Elaboration of the Company's Corporate Social Responsibility Report according to the standards of relevant accreditation institutions, if any:

The Company's 2017 CSR report has been prepared in accordance with the "Global Reporting Initiative (GRI) Standards guidelines" and AA1000 (2008) standards; also, verified by SGS-Taiwan in conformity with the GRI Standards (Core Option) and AA1000 AS Type I intermediate assurance level.

3.6 Implementation of Business Conduct Policy

<table>
<tr><th rowspan="2">Item</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from ”Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies” and reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Summary</th></tr>
<tr><td>1. Establishment of business conduct policy and plan
(1) Has the Company adhered to the business conduct policy explicitly set out in its regulations and external documents, supported by the active commitment of the Board of Directors and Management to its implementation?</td><td>V</td><td></td><td>(1) The Company has the amendment to the “Best Practice Principles” and “Codes of Ethics” approved at the Board meeting held at 7 August 2018.
For implementation, the Company has both publicized at the company website, and promoted thru internal meetings and daily operation.</td><td rowspan="3">None</td></tr>
<tr><td>(2) Has the Company taken and carried out any precautionary measures, conduct guidelines, disciplines or grievance to prevent the unethical business?</td><td>V</td><td></td><td>(2) The Company has established the business culture in the best practice and precaution against unethical business by promoting periodical employee training and requiring the compliance and respect of the interest related party on the ethics and best practice principles. Relevant stipulations are disclosed at the company website. (http://www.oucc.com.tw)</td></tr>
<tr><td>(3) Has the Company taken any precautionary measures against the high-risk unethical business activities according to Article 7-2 of the “Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies” ?</td><td>V</td><td></td><td>(3) The Company’s precautionary measures against unethical business include:
a) The standards for offer or acceptance of unjust interests.
b) The procedure for offering legal political donations.
c) The procedure for offer of legal charity donations or sponsorship.
d) The stipulation for the avoidance of conflicts of post related interests.
e) The non-disclosure stipulation on procured business confidentiality or sensitive commercial information.
f) The norm and procedures for suppliers, clients and business counterparties involving in unethical business conduct.
g) The procedure for the infringement of the business best practice principles.
h) The discipline disposal for infringement.</td></tr>
</table>

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
2. Implementation of the Codes of Business Conduct				
(1) Does the Company access the ethical conduct records of its counterparts and specify "ethical clauses" in business contracts?	V		(1) The Company shall, on the premise, comply with the relevant laws & regulations governing listed companies to fulfill ethical business. The legitimacy of the Company's agents, vendors, clients or business counterparties will be considered before trading to avoid the occurrence of unethical business in advance. If violated, all rights and cooperation with the clients, agents, contractors, vendors or other stakeholders will be terminated.	None
(2) Has the Company established dedicated units under supervision of the Board to promote corporate ethical management and to report accordingly to the Board of the implementation status?	V		(2) The Company's human resources dept. has set up "Code of Ethics" and "Best Practice Principles", incorporated them into employment guidelines, publicized on the Company's website, and promulgated to all the employees. Such implementation status is reported regularly to the Board.	
(3) Does the Company promulgate policies to prevent conflicts of interests and offer channels for reporting such conflicts?	V		(3) The Company has stipulated the "Discipline and Remedy for Violation of Codes of Ethics and Best Practice Principles", as a guideline. The Company tolerates no violation. Any employees obtains, or intends to obtain, improper benefit for oneself and others at the cost of the Company by using one's position or authority shall be dismissed, and shall unconditionally indemnify the Company for all losses occurred. An appeal system is established in the Company. Any of All Employees being accused to violate the Guidelines may appeal for remedy via the system.	

Item	Implementation Status			Deviations from "Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies" and reasons
	Yes	No	Summary	
(4) Has the Company established an effective operation of the accounting and internal control system, and periodically conducted internal audits by internal auditors, or audited by CPA? (5) Does the Company periodically conduct the internal and external training on ethical management?	V V		(4) The Company's accounting and internal audit departments have set up an effective accounting and internal control system for regular review and verification on the info validity and transparency. Pursuant to "Regulation Regarding Establishment of Internal Control Systems by Public Companies" and the "Best Practice Principles", the internal auditing dept. has set up the internal control system and report periodically the compliance results based on the annual audit plan and risks assessment examination and have it submitted to the Audit Committee and Board of Directors. (5) The Company conducts periodically the training and promulgation for the sales units and the business engaged personnel, to manifest its implementation in ethical management to the stakeholders. The "Best Practice Principles", "Codes of Ethics" and relevant rules are publicized at the Company's website.	None
3. Establishment of Reporting Channels for Violations of the Codes of Business Conduct (1) Has the Company established a specific reporting and reward system through convenient channels for lodging complaints? And, does the Company assign the dedicated personnel to attend to the matter? (2) Has the Company established the standard operation procedure for investigating and proceeding of the report in a confidential manner?	V V		(1) The Company has established multi communication channels for reporting of the unethical business conduct, following the guideline of the stipulated Discipline and Remedy for Violation of Codes of Ethics and Best Practice Principles. The personnel who discover the violation of such may report to the management, internal auditing chief, HR department or other appropriate manager of the Company. (2)The Company's whistle-blowing methods are abided by the Discipline and Remedy for Violation of Codes of Ethics and Best Practice Principles, with the investigation conducted through independent channel to ensure the ID protection of the whistle blower and the content of the report.	None

<table>
<tr><td rowspan="2">Item</td><td colspan="3">Implementation Status</td><td rowspan="2">Deviations from ”Corporate Governance Best-Practice Principle for TWSE/GTSM Listed Companies” and reasons</td></tr>
<tr><td>Yes</td><td>No</td><td>Summary</td></tr>
<tr><td>(3) Does the Company adopt measures to protect whistle blowers from reprisals for having filed the complaint report?</td><td>V</td><td></td><td>(3)The Company preserves the ID of the whistle blower and the content of the report in confidential to keep the whistle blower from improper disposal.</td><td>None</td></tr>
<tr><td>4. Enforcement of Information Disclosure
(1) Has the Company disclosed its “Best Practice Principles” and the implementation through its official website or the market observation post system?</td><td>V</td><td></td><td>The ”Best Practice Principles” and “Codes of Ethics” of the Company are fully disclosed on its official website (http://www.oucc.com.tw/tw/investor_m06.asp) and the market observation post system.</td><td>None</td></tr>
<tr><td colspan="5">5. If the Company has established its ethical business best practice principles in accordance with the “Ethical Business Best-Practice Principles for TWSE/GTSM Listed Companies”, clearly describe the function of such principles and any discrepancies in ethical business best-practice principles: None</td></tr>
<tr><td colspan="5">6. Other important information regarding the Company’s operation in ethical business best-practice, such as the reviewing and amending of the Company’s business best-practice principles and so on:
The Company adhered to its management philosophy for integrity, transparency and responsibility, to formulate the policy based on ethical business, and established fair corporate governance and risks control mechanisms to create and sustain the business environment.
Before engaging in any business transactions, the Company will consider the validity of agents, vendors, customers or other trading counterparties and whether they hold an ethical business record or not. The Company will avoid engaging in transactions with any party that has an unethical business record.</td></tr>
</table>

3.7 Disclosure of access to Company Corporate Governance Best Practice Principles and related rules and regulations:

3.7.1 Information on the Company website http://www.oucc.com.tw/tw/investor_m02.asp is periodically updated.

3.7.2 The information posted on the website is collected and maintained by dedicated personnel. The disclosed information about finance and minutes of the meetings with institutional investors will be posted on the website and be accessible to the public.

3.8 Other information enabling a better understanding of Company corporate governance:

3.8.1 Employee rights and interests: The Company not only secures employees legal rights and interests pursuant to the law, but provides all sorts of welfare, on-job trainings, and pension & retirement plan.

3.8.2 Staff care: The Company provides employees with an annual health examination, employee group insurance, and safety & health training, and encourages several different club activities, offers urgent relief measures, attends to colleagues' physical and mental health and life balance through a Worker Welfare Commission.

3.8.3 Investor relations: The Company has delegated spokesman, acting spokesman, and stock service agent Oriental Securities Corporation to handle suggestions or questions from shareholders. An investor relations section has also been established at the Company's website for the delegated IR to respond to investors enquiries

3.8.4 Vendor relations: Apart from the formulated supplier management procedures requiring vendors' compliance to the issues of environment protection, safety and health, etc., suppliers are also requested to sign the Statement of Suppliers Collaborative Dedication to the Enhancement of Corporate Social Responsibility.

3.8.5 The rights of stakeholders: The dedicated investor relations section on the website provides questionnaire and email contact for IR representative to compile and respond to the critical issues from the stakeholders

3.8.6 The status of advance education of Directors and Supervisors:

(1) The continued advanced program of Directors and Supervisors is as follows:

Job title	Name	Date of continued education		Organizer	Course name	Hours
		from	to			
Chairman of the Board	Douglas T. Hsu	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
Vice Chairman of the Board	Johnny Shih	2018.8.3	2018.8.3	Taiwan Corporate Governance Association(TCGA)	From the Change of Bitcoin to Corporate Anti-corruption and Information Security	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
Directors	Humphrey Cheng	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors-and Corporate Governance Workshop	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
	Kao-Shan Wu	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
	Roy Wu	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors-and Corporate Governance Workshop	3hrs

Job title	Name	Date of continued education		Organizer	Course name	Hours
		from	to			
Directors		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors-and Corporate Governance Workshop	3hrs
	Justin Tsai	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
		2018.8.9	2018.8.9	Taiwan Corporate Governance Association(TCGA)	Practice of Operation of the Audit Committee	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF))	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
	Paul Chuang	2018.7.24	2018.7.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
	Eric Chueh	2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
Inde-pendent Directors	C.T. Chan	2018.9.13	2018.9.13	Securities & Futures Institute (SFI)	Advanced Seminar for Operational Practice of Board of Directors (incl. Independent Directors)	6hrs
	Walt Cheng	2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs
	Ping Lih	2018.7.18	2018.7.18	Securities & Futures Institute (SFI)	Advanced Seminar for Operational Practice of Board of Directors (incl. Independent Directors)	3hrs
		2018.7.19	2018.7.19	Securities & Futures Institute (SFI)	Advanced Seminar for Operational Practice of Board of Directors (incl. Independent Directors)	3hrs
		2018.12.12	2018.12.12	Securities & Futures Institute (SFI)	Advanced Seminar for Operational Practice of Board of Directors (incl. Independent Directors)	3hrs
		2018.12.24	2018.12.24	Taiwan Academy of Banking and Finance (TABF)	Practice of Operation of Board of Directors and Corporate Governance Workshop	3hrs

3.8.7 The implementation in risks management policy and measuring standard

The Company's implementation in risks management and each accountable unit:

(1) Audit: Set up risks-oriented annual auditing plan, accountable for revision of the internal control system and the proceeding of auditing.

(2) Financial affairs: Established electronic financial platform to provide clear financial info, operation analyses and credit management review.

(3) The Company has established "Credit Committee", which is chaired by President and composed of the management of HR & Admin. Group, Sales Div., Finance Dept. and Auditing Dept., to review on customers status before deciding the credit ratings and allowances on regular basis. The committee is also in charge of the continual monitor and control of each credit account and account receivables, in order to achieve the target of "zero bad debt".

(4) IT security: IT dept. has mapped out the Company's internet security and intranet protection by way of building the remote backup service and cloud data center, to lower the risks of IT security.

Please refer to p113-p116 the Analysis of Risk Factors for more information.

3.8.8 The implementation status of customer policy: The Company adheres to a management philosophy that highlights "Sincerity, Diligence, Thrift, Prudence and Innovation", and follows up products and the degree of service satisfaction as a reference for the continuous improvement of business strategies, and also maintains a fair and stable cooperative relationships with customers.

3.8.9 The Company's purchase of liability insurance for Directors: The Company's Directors have been conducting according to law. The Company has amended its Articles of Incorporation and Corporate Governance Principles in regard with the assessment of purchasing the liability insurance for Directors, and the management, and reported to the Board on the insured contents.

3.8.10 Employees code of conduct and ethics

"Sincerity, Diligence, Thrift, Prudence and Innovation" has not only been the management philosophy to the Company, but the principle of conduct to the employees. The code of conduct and ethics of the Company were notified publicly after resolved by the Board, and submitted to the Shareholders' Meeting for approval.

(1) All employees joining the company shall sign the "Letter of Undertaking" which shall be included in the employees' personnel file. The Undertaking primarily declares the employees' consent to comply with Company regulations, personnel management rules and non-disclosure with respect to Company business confidentiality. The contents of public information are accessible to all employees at all times.

(2) The employee code of conduct and ethics is summarized as below:
The work rules include: (a) general provisions (b) employment (c) service, vacation leave, breaks, special leave (d) application for leave (e) salary and wages (f) year-end bonus (g) safety, health, welfare, pension, occupational disaster compensation (h) discipline (i) performance and reward & punishment (j) resignation, termination of employment, lay-offs (k) retirement (l) supplementary provisions.

(3) The non-disclosure agreement consists of: (a) definitions of confidential information (b) non-disclosure obligation (c) legal consequence and liability of default (d) effect of termination of employment (e) concession of rights (f) applicable laws and jurisdiction.

3.8.11 With the corporate sustainability as a supreme goal, the Company has valued a great deal of the talents cultivation and developed the succession plan, of which successive candidate's worth ethics needs to meet with the Company's management philosophy "Sincerity, Diligence, Thrift, Prudence and Innovation", whereas qualification of individual working ability, diversified development potential and decision-making strengths shall prove to be outstanding,

3.8.12 The Company passed the "Procedures for the Reporting of Important Internal Information" at the 4th meeting of the Board of Directors of the 12th term on December 23, 2009. The Company has also propagated the following:

(1) The "Procedures for Handling Material Inside Information" shall be provided to new Managers upon signing the "Letter of Undertaking".

(2) When reporting any changes in equity the Company should already have given the Managers the "Procedures for Handling Material Inside Information" and also the relevant laws and regulations governing insider trading.

(3) The Company's Managers and employees shall also sign the non-disclosure agreement when they are appointed and the Company shall provide all employees with the "Procedures for Handling Material Inside Information".

3.8.13 The related certificates and licenses are issued by the competent authority to the personnel related to transparency of the Company's financial information:

The R.O.C. CPA: 1 person	The P.R.C. CPA: 1 person
The US Certified Management Accountant: 1 person	International internal auditor: 6 persons
International internal control self-assessment specialist: 1 person	Basic proficiency test on Corporate Internal Controls: 3 persons
The R.O.C. bookkeeper: 5 persons	Wealth management planner: 3 persons
Trust personnel: 4 persons	Securities investment analyzer: 3 persons
Securities specialist: 4 persons	Futures specialist: 1 person
Senior securities specialist: 5 persons	

3.9 Status of internal control system

3.9.1 Internal Control Declaration

Oriental Union Chemical Corporation Ltd.
Declaration of the International Control System

Date: Mar 19, 2019

The Company inspected the 2018 internal control system autonomously with the following results:

1. The Company is fully aware that the Board of Directors and the management are responsible for the establishment, implementation, and maintenance of the internal control system and it has been established accordingly. The purpose of its establishment was to reasonably ensure the fulfillment of effective operation and efficiency (including profit, performance, and protection of assets safety), and the reliability, timeliness, transparency and regulatory compliance of financial reports.
2. The internal control system design has inherent limitations. No matter how perfect such control is, it can only provide reasonable assurance of the fulfillment of the three objectives referred to above. The effectiveness of such an internal control system could be influenced by changes of the environment and other circumstances. Therefore, the Company internal control system has been designed with a self-monitoring mechanism so that corrective action will be activated immediately upon the identification of any nonconformity.
3. The Company has assessed the effectiveness of the design and implementation of the internal control system in accordance with criteria provided in the "Regulations Governing the Establishment of Internal Control Systems by Public Companies" (hereinafter referred to as "the Regulations"). The criteria defined in "the Regulations" include five elements that depend on the management control process: (1) environment controls, (2) risk assessment, (3) control processes, (4) information and communications, and (5) supervision. Each of the five elements is then divided into sub-categories. Please refer to "the Regulations" for details.
4. The Company has implemented criteria for inspection of the internal control system referred to above to ascertain its effectiveness, design and implementation.
5. The Company, based on the inspection results referred to above, declared (on December 31, 2018) that the internal control system, including the supervision and management of subsidiaries, is reasonably effective and achieves the objectives of operation and efficiency, the financial report is of reliability, timeliness, transparency and regulatory compliance.
6. The Declaration of Internal Control System is the main content of the Company's annual report and published prospectus. Any false statement and concealment of the published content referred to above involves liability set out in Article 20, Article 32, Article 171, and Article 174 of the Securities and Exchange Act.
7. The Declaration of the Internal Control System was resolved at a meeting of the Board of Directors on March 19, 2019 with no objections by any of the eleven attending Directors. The contents of the declaration have been accepted without objection.

Oriental Union
Chemical Corporation Ltd.

Chairman: Douglas T. Hsu____________

President: Justin Tsai____________

3.9.2 The internal control audit report issued by the CPA commissioned to conduct an internal control audit, if any: N/A

3.10 Punishment of the Company or its internal personnel in accordance with the law, punishment of internal personnel by the Company for violating internal control system regulations, main deficiencies, and improvements during the recent year and up to the date of publication of this annual report: N/A

3.11 Resolutions reached at a meeting of shareholders or by the Board of Directors during the recent year and up to the date of publication of this annual report:

3.11.1 Shareholders Meeting

Meeting time	Major resolution	Status
2018.6.8	<u>Report</u> (1) Business Report 2017 (2) Financial Statements 2017 (3) The Supervisors’ review report on 2017 Business Report and Financial Statements (4) The 2017 Directors and Supervisors’ remuneration and employees’ compensation	
	<u>Recognition</u> (1) Approval of the Company's business report and financial statements 2017	Approved and proceeded accordingly.
	(2) Approval of the Company's 2017 profit allocation (NT$1.75 in cash per share)	Approved and proceeded accordingly. July 8, 2018 was set as the ex-dividend date, and cash dividend was distributed on July 27, 2018.
	<u>Discussion</u> (1) Amendments to the Company’s Articles of Incorporation	Acquired the approval of registration from Ministry of Economy on June 26, 2018.
	(2) Amendments to the Company’s Election Procedures for Board of Directors	Approved and proceeded accordingly.
	(3) Amendments to the “Procedures for Capital Lending to Others” of OUCC	Approved and proceeded accordingly.
	(4) Amendments to the “Procedures for Endorsements and Guarantees” of OUCC	Approved and proceeded accordingly.
	(5) Amendments to the “Procedures for Acquisition and Disposition of Assets” of OUCC	Approved and proceeded accordingly.
	(6) The reelection of the Board (including the Independent Directors)	The reelected Board of the 15th term composes of 11 Directors (including 3 Independent Directors), the registry for change was approved by the Ministry of Economic Affairs under Chi-So-Sun-Tze No. 10701070700 dated 26 June 2018.
	(7) The release of relevant Directors from the non-competition restriction under the Article 209 of Company Law	Approved and proceeded following shareholders’ meeting resolution.

3.11.2 Board of Directors Meeting

Term of the Board/ Meeting Date	Major resolution	Items regarding Article 14-3 of Securities & Exchange Act	The objected or qualified opinion of the Independent Director
12th meeting of 14th term 2018.3.19	1. Approval of 2017 Directors and Supervisors' remuneration and employees' compensation	V	None
	2. Approval of the Company's 2017 financial report (including consolidated reports)	V	
	3. Approval of the Company's 2017 profit allocation	V	
	4. Approval of the 2017 "Declaration of Internal Control System"	V	
	5. Approval of amendment to the Article of Incorporation	V	
	6. Approval of amendment to the "Election Procedures of Board of Directors"	V	
	7. Approval of amendment to the "Procedures for Capital Lending to Others"	V	
	8. Approval of amendment to the "Procedures for Endorsements and Guarantees"	V	
	9. Approval of amendment to the "Procedures for Acquisition and Disposition of Assets"	V	
	10. Approval of proposal for election of the Company's Board of Directors at end of term		
	11. Approval of proposal for convening 2018 shareholders' annual general meeting.		
	12. Approval of proposal for the 2018 operating and capital budget		
	13. Approval of the Company's capital expenditure projects, of which contents of agreement be supplemented at next BOD meeting		
	14. Approval of the change of the Company's Accounting Manager	V	
	15. Approval of the change of the Company's organization structure and personnel		
	Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Passed unanimously by the attended Directors, apart from the proposals 12 & 13 aforementioned		
13th meeting of 14th term 2018.4.24	1. Approval of candidate qualification of the Board Director nominated by shareholders	V	None
	2. Approval of the release of relevant Directors from the non-competition restriction under the Article 209 of Company Law	V	
	3. Approval of the Company's 2017 Business Report	V	
	4. Approval of the assessment of independence and competence of the 2018 CPAs		
	5. Approval of proposal for the 2018 operating and capital budget		
	6. Approval of supplement report on the collaborated project of C_2 containers at Continental Pier of Kaoshiung Harbor		
	Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Passed unanimously by the attended Directors		

Term of the Board/ Meeting Date	Major resolution	Items regarding Article 14-3 of Securities & Exchange Act	The objected or qualified opinion of the Independent Director
1st meeting of 15th term 2018.6.8	1. Approval of proposal for the selection of the Chairman and Vice Chairman of the Board 2. Approval of the Company's Audit Committee Charter 3. Approval of the Company's President appointment 4. Approval of the Company's appointment of managers and up 5 Approval of the release of relevant managers from the non-competition restriction under the Article 209 of Company Law Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Passed unanimously by the attended Directors	V	None
2nd meeting of 15th term 2018.8.7	1. Approval of the appointment of the Company's Remuneration Committee members 2. Approval of the Company's liability insurance over Directors and major officers 3. Approval of amendment to "Board of Director Meeting Rules", "Procedures for Handling Material Inside Information", "Remuneration Committee Charter", "Corporate Governance Principles", "Codes of Ethics" and "Best Practice Principles" of OUCC Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Passed unanimously by the attended Directors	V V V	None
3rd meeting of 15th term 2018.11.8	1. Approval of the Company's jointly participation in the loaning of NTD250 million to Tong Fu Investment Corporation 2. Approval of the Company's 2019 capital expenditure projects 3. Approval of the Company's 2019 Internal Audit Plan 4. Approval of the Company's Internal Control System (including internal auditing implementation bylaw) 5. Approval of the change of the Company's organization structure and personnel Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Besides the proposal 1 with Directors entering recusal due to personal interests , the rest are passed unanimously by the attended Directors	V	None
4th meeting of 15th term 2019.3.19	1. Approval of the 2018 Directors remuneration and employees compensation 2. Approval of the Company's 2018 financial report (including individual report) 3. Approval of the Company's 2018 profit allocation 4. Approval of the Company's 2018 Business Report 5. Approval of the "Declaration of Internal Control System" of OUCC	V V V V V V	None

Term of the Board/ Meeting Date	Major resolution	Items regarding Article 14-3 of Securities & Exchange Act	The objected or qualified opinion of the Independent Director
	6. Approval of amendment to "Procedures for Acquisition or Disposition of Assets" of OUCC 7. Approval of amendment to "Procedures for Capital Lending to Others" and "Procedures for Endorsements and Guarantees" of OUCC 8. Approval of proposal for convening 2019 shareholders' annual general meeting 9. Approval of the proposal for the 2019 operating and capital budget Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Passed unanimously by the attended Directors	V V	
5th meeting of 15th term 2019.5.9	1. Approval of the Company's jointly participation in the loaning of NTD273,011,200 to Oriental Petrochemical (Taiwan) Co., Ltd. 2. Approval of the assessment of independence and competence of the CPAs 3. Approval of amendment to "Articles of Incorporation", "Board of Director Meeting Rules", "Audit Committee Charter" and "Remuneration Committee Charter" of OUCC 4. Approval of proposal for the discharge and appointment of the Remuneration Committee members of the 4th term 5. Approval of proposal for the Company's personnel Independent Directors' opinion: None The Company's disposition to Independent Directors' opinion: None Results of the resolutions: Besides the proposal 1 with Directors entering recusal due to personal interests , the rest are passed unanimously by the attended Directors	V V	None

3.12 Recorded or written statements of dissent made by any Director or Supervisor to important resolutions passed by the Board of Directors during the recent year and up to the date of publication of this annual report: N/A

3.13 Summary of discharge and resignation of parties relating to the annual report (Chairman, President, Chief Accountant, Financial Officer, Chief Internal Auditor and R&D Officer) in the recent year and up to the date of publication of this annual report:

Title	Name	Date of Recruiting	Date of Discharge	Reason for Resignation or Discharge
Assistant Vice President of Accounging	Judy Wang	2017/11/07	2018/03/18	Position adjustment

4. CPA professional fee

4.1 Breakdown of CPA professional fee

4.1.1 CPA information

Firm Name	CPA Name		Duration of Audit	Remark
Deloitte Touche Taiwan	Hsin-Wei Tai, CPA	Yu-Wei Fan, CPA	2018.01.01～2018.12.31	

4.1.2 CPA professional fee

Price Range	Fees	Audit Fees	Non-Audit Fees	Total
1	Less than NT$2,000 thousand		√	√
2	NT$2,000 thousand (inclusive)~NT$4,000 thousand	√		√
3	NT$4,000 thousand (inclusive)~NT$6,000 thousand			
4	NT$6,000 thousand (inclusive)~NT$8,000 thousand			
5	NT$8,000 thousand (inclusive)~NT$10,000 thousand			
6	NT$10,000 thousand (inclusive) or above			

Currency unit: NTD thousand

Firm Name	CPA Name	Audit Fees	Non-Audit Fees					Duration of Audit	Remark
			System design	Commercial and Industrial Registration	Human Resource	Others	Subtotal		
Deloitte Touche Taiwan	Hsin-Wei Tai & Yu-Wei Fan	3,340	0	0	0	15	15	2018.10.01 ∫ 2018.12.31	IFRS 16 Letter of opinion

4.2 In the case of a change of CPA firm and the audit fees for the year of the change are less than those of the previous year, please specify the audit fees before and after the change, and the reasons for the change: N/A

4.3 In the case of the audit fees being 15% less than that of the previous year, please specify the audit fees before and after the change, and the reasons for the change: N/A

5. CPA replacement

5.1 Former CPA

2017 :

<table>
<tr><td>Date of change</td><td colspan="4">November 11, 2017</td></tr>
<tr><td>Reasons for the change and descriptions</td><td colspan="4">The former external auditors were Yu-Wei Fan, CPA and C. P. Shih, CPA of Deloitte Taiwan. Due to the business arrangement of the Firm, Hsin-Wei Tai, CPA and Yu-Wei Fan, CPA of the Firm succeeded to the external auditors as from Q4 in 2017.</td></tr>
<tr><td rowspan="3">Termination by the appointer or CPA or rejection of the appointment</td><td colspan="2">Client / Status</td><td>CPA</td><td>Appointer</td></tr>
<tr><td colspan="2">Voluntary termination of the appointment</td><td>N/A</td><td>N/A</td></tr>
<tr><td colspan="2">Rejection (renewal) of appointment</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Audit report with opinion other than those audited reports with an unqualified opinion issued in the recent two years, and reasons for issue of the report.</td><td colspan="4">N/A</td></tr>
<tr><td rowspan="6">Dissidence with the issuer?</td><td rowspan="4">Yes</td><td></td><td colspan="2">Accounting principles or practices</td></tr>
<tr><td></td><td colspan="2">Disclosure of financial statement</td></tr>
<tr><td></td><td colspan="2">Scope or step of audit</td></tr>
<tr><td></td><td colspan="2">Others</td></tr>
<tr><td>N/A</td><td colspan="3">√</td></tr>
<tr><td colspan="4">Notes</td></tr>
<tr><td>Other notes to be disclosed (those to be disclosed referred to article 10-6-1-4 ~ 7of the standards)</td><td colspan="4">N/A</td></tr>
</table>

2018 : Nil

5.2 Successive CPA

2017 :

Firm Name	Deloitte Taiwan
CPA Name	Hsin-Wei Tai
Date of appointment	Approved at the Directors' meeting on November 11, 2017
The accounting treatment of or application of accounting principles to a specified transaction, or the type of audit opinion that might be rendered on the company's financial report, prior to the formal engagement of the successive certified public accountant	N/A
The successive certified public accountant's written opinion regarding the matters on which the Company did not agree with the former certified public accountant	N/A

2018 : Nil

5.3 The written response of the former CPA to article 10-6-1 and article 10-6-2-3 of the standards:

N/A

6. Information regarding the Chairman, President, and Financial or Accounting Manager of the company who has worked with the CPA firm which conducts the Audit of the Company or an affiliate of said firm in the recent year: N/A

7. Any transfer of equity interests and pledge of, or change in equity interest, by a Director, managerial officer, or shareholder with a stake of more than 10 percent.

7.1 Shareholding variation of Directors, managerial officers and major shareholders

Unit: share

Job title (Note 1)	Name	2018		Ending April 13	
		Shares increase (decrease)	Pledge shares increase (decrease)	Shares increase (decrease)	Pledge shares increase (decrease)
Chairman	Douglas T. Hsu	0	0	0	0
Director	Far Eastern New Century Corporation	0	0	0	0
Director	Yue Ming Trading Company	0	0	0	0
Director	Yu Li Investment Corporation	0	0	0	0
Director	Fu Da Transport Corporation	0	0	0	0
Independent Director	C. T. Chan	0	0	0	0
Independent Director	Walt Cheng	0	0	0	0
Independent Director	Ping Lih	0	0	0	0
Managerial officer	Justin Tsai	0	0	0	0
Managerial officer	Victoria Peng	0	0	0	0
Managerial officer	C. K. Tsai	0	0	0	0
Managerial officer	Y. S. Chang	0	0	0	0
Managerial officer	Judy Wang	0	0	0	0
Managerial officer	Wen Fan Leu	0	0	0	0
Managerial officer	Steven Wu	0	0	0	0
Managerial officer	Allen Yu (Note 2)	0	0	0	0
Managerial officer	Amy Cheng (Note 3)	0	0	0	0
Managerial officer	Martin Kuo (Note 4)	0	0	0	0
Managerial officer	F. H. Chang (Note 5)	0	0	0	0
Managerial officer	D. K. Yu (Note 6)	0	0	0	0
Managerial officer	Diamond Chang (Note 7)	0	0	0	0
Managerial officer	Roger Lin (Note 8)	0	0	0	0
Managerial officer	Michael Chang (Note 9)	0	0	0	0

Note 1: The scope of managerial officers shall be defined according to the Securities and Futures Bureau decree under Tai-Tsai-Cheng-3-Tze No. 0920001301 dated March 27, 2003.

Note 2: Allen Yu was officially appointed effective 1 March, 2018.

Note 3: Amy Cheng was officially appointed effective 20 March, 2018.

Note 4: Martin Kuo was officially appointed effective 20 March, 2018.

Note 5: F.H. Chang was officially appointed effective 16 November, 2018.

Note 6: D.K. Yu was officially retired starting 30 October, 2018.

Note 7: Diamond Chang was officially resigned effective 21 March, 2018.

Note 8: Roger Lin was officially resigned effective 16 September, 2018.

Note 9: Michael Chang was officially resigned effective 1 April, 2019.

7.2 Shareholding transferred (while the counterparty is a related party): N/A

7.3 Shareholding pledged: N/A

8. Top 10 shareholders and their relationships:

13 April, 2019 unit: share

Name	Current shareholding		Spouse and minor children's shareholding		Shareholding in name of others		Name, relationship of top 10 shareholders being the related party as spouse or kin within the second tier under the Civil Code		Remark
	Quantity of shares	Share holding	Quantity of shares	Share holding	Quantity of shares	Share holding	Name	Relationship	
Far Eastern New Century Corp	81,217,005	9.17%	0	0%	0	0%	Yuan Ding Investment Co Ltd Asia Cement Corp Yuan Tung Investment Co Ltd Kai Yuan International Investment Co Ltd Ding Yuan Investment Co Ltd Tong Fu Investment Corp	Note 1, Note 3 Note 1, Note 2, Note3 Note 1 Note 1, Note 3 Note 1 Note 3	
Representative: Douglas T. Hsu	1,664,781	0.19%	0	0%	0	0%	N/A	N/A	
Yuan Ding Investment Co Ltd	70,817,684	8.00%	0	0%	0	0%	Far Eastern New Century Corp Asia Cement Corp Yu Yuan Investment Co Ltd	Note 2, Note 3 Note 1, Note 3 Note 1	
Representative: Douglas T. Hsu	1,664,781	0.19%	0	0%	0	0%	N/A	N/A	
Cathay Life Insurance Co Ltd	66,213,000	7.48%	0	0%	0	0%	N/A	N/A	
Representative: T. K. Huang	0	0%	0	0%	0	0%	N/A	N/A	
Asia Cement Corp	63,766,522	7.20%	0	0%	0	0%	Far Eastern New Century Corp Yuan Ding Investment Co Ltd Yu Yuan Investment Co Ltd Yuan Tung Investment Co Ltd Kai Yuan International Investment Co Ltd Ding Yuan International Co Ltd	Note 1, Note 2, Note 3 Note 2, Note 3 Note 1 Note 2 Note 2 Note 2	
Representative: Douglas T. Hsu	1,664,781	0.19%	0	0%	0	0%	N/A	N/A	
Yuan Tung Investment Co Ltd	49,705,396	5.61%	0	0%	0	0%	Far Eastern New Century Corp Asia Cement Corp	Note 2 Note 1	
Representative: C. C. Wang	0	0%	0	0%	0	0%	N/A	N/A	
Fubon Life Insurance Co Ltd	33,287,000	3.76%	0	0%	0	0%	N/A	N/A	
Representative: M. H. Tsai	0	0%	0	0%	0	0%	N/A	N/A	
Yu Yuan Investment Corp	33,224,017	3.75%	0	0%	0	0%	Asia Cement Corp Yuan Ding Investment Co Ltd	Note 2 Note 2	
Representative: C. M. Chen	0	0%	0	0%	0	0%	N/A	N/A	

Name	Current shareholding		Spouse and minor children's shareholding		Shareholding in name of others		Name, relationship of top 10 shareholders being the related party as spouse or kin within the second tier under the Civil Code		Remark
	Quantity of shares	Share holding	Quantity of shares	Share holding	Quantity of shares	Share holding	Name	Relationship	
Kai Yuan International Investment Co Ltd	32,473,173	3.67%	0	0%	0	0%	Far Eastern New Century Corp Asia Cement Corp Tong Fu Investment Corp	Note 2, Note 3 Note 1 Note 3	
Representative: Humphrey Cheng	941	0%	0	0%	0	0%	N/A	N/A	
Ding Yuan International Co Ltd	27,365,495	3.09%	0	0%	0	0%	Far Eastern New Century Corp Asia Cement Corp	Note 2 Note 1	
Representative: M. H. Tsai	0	0%	0	0%	0	0%	N/A	N/A	
Tong Fu Investment Corp	13,753,554	1.55%	0	0%	0	0%	Far Eastern New Century Kai Yuan International Investment Co Ltd	Note 3 Note 3	
Representative : Humphrey Cheng	941	0%	0	0%	0	0%	N/A	N/A	

Note 1: The investees who are evaluated under the equity method

Note 2: The investors whose investment in the Company is evaluated under the equity method.

Note 3: The company of which the chairman or president is the chairman or president of another company, where a spouse or kin within the second tier is employed.

9. The number of shares held by the Company and Company Directors, managerial officers and the entities directly or indirectly controlled by the Company in a single company, and calculating the consolidated shareholding percentage of the above categories.

April 13, 2019 unit: 1000 shares

Investee (note)	Invested by the Company		Invested by Directors, management, and enterprises controlled by the Company directly or indirectly		Combined Investment	
	Quantity of shares	Shareholding	Quantity of shares	Shareholding	Quantity of shares	Shareholding
Tong Fu Investment Corporation	143,445	100%	0	0%	143,445	100%
Pacific Petrochemical (Holding) Ltd	148	100%	0	0%	148	100%
OUCC (Bermuda) Holding Ltd	40	100%	0	0%	40	100%

IV. Capital Overview

1. Capital and shares

1.1 Source of Capital

Unit: NTD thousand, 1000 shares

Year/ Month	Issuing Price	Authorized Capital		Paid-in Capital		Remarks		
		Shares	Amount	Shares	Amount	Source of Capital	Capital increased by assets other than cash	Others
2000/07	10	560,000	5,600,000	511,115	5,111,150	Recapitalization of capital surplus: 379,972		Note 1
						Capital increase in cash: 30,000		Note 2
2001/04	10	560,000	5,600,000	505,902	5,059,020	Cancelled treasury stock: 52,130		Note 3
2001/09	10	560,000	5,600,000	495,907	4,959,070	Cancelled treasury stock: 99,950		Note 4
2003/07	10	560,000	5,600,000	535,596	5,355,961	Recapitalization of retained earnings：97,712		Note 5
						Recapitalization of capital surplus: 299,179		
2004/07	10	820,000	8,200,000	616,467	6,164,669	Recapitalization of capital surplus: 808,708		Note 6
2005/02	10	820,000	8,200,000	676,467	6,764,669	Capital increase in cash: 600,000		Note 7
2005/09	10	820,000	8,200,000	746,554	7,465,544	Recapitalization of capital surplus: 700,875		Note 8
2006/07	10	820,000	8,200,000	770,721	7,707,212	Recapitalization of capital surplus: 241,668		Note 9
2007/07	10	820,000	8,200,000	787,486	7,874,864	Recapitalization of capital surplus: 167,652		Note 10
2008/08	10	820,000	8,200,000	805,185	8,051,846	Recapitalization of capital surplus: 176,982		Note 11
2012/08	10	1,000,000	10,000,000	885,703	8,857,031	Recapitalization of capital surplus: 805,185		Note 12

Note 1: (89) Tai-Tsai-Cheng (1) No. 28043 dated March 30, 2000
Note 2: (89) Tai-Tsai-Cheng (1) No. 31633 dated April 25, 2000
Note 3: (90) Tai-Tsai-Cheng (3) No. 109337 dated March 9, 2001
Note 4: (90) Tai-Tsai-Cheng (3) No. 143329 dated July 19, 2001
Note 5: (92) Tai-Tsai-Cheng (1) No. 0920126972 dated June 18, 2003
Note 6: (93) Tai-Tsai-Cheng (1) No. 0930123783 dated June 28, 2004
Note 7: (93) Ching-Kuan-Cheng (1) No. 0930145975 dated October 19, 2004
Note 8: (94) Ching-Kuan-Cheng (1) No. 0940123773 dated June 14, 2005
Note 9: (95) Ching-Kuan-Cheng (1) No. 0950124903 dated June 19, 2006
Note 10: (96) Ching-Kuan-Cheng (1) No. 0960032441 dated June 27, 2007
Note 11: (97) Ching Kuan-Cheng (1) No. 09701200670 dated August 13, 2008
Note 12: Ching-Kuan-Fa-Tze No. 1010027826 dated June 22, 2012

Unit: share

Type of share	Authorized Capital Stock			Remark
	Outstanding Shares (listed)	Unissued Shares	Total	
Common stock	885,703,029	114,296,971	1,000,000,000	—

1.2 Self - Registration System: Nil

1.3 Composition of Shareholders

April 13, 2019

Composition of Shareholders / Quantity	Government apparatus	Financial organization	Other juridical persons	Individuals	Foreign institution or foreigner	Total
Number of persons	13	29	130	58,238	184	58,594
Shares held when appointed	4,412,493	110,434,681	448,379,505	211,557,061	110,919,289	885,703,029
Shareholding	0.50%	12.47%	50.62%	23.89%	12.52%	100.00%

1.4 Distribution Profile of Share Ownership

April 13, 2019

Shareholders Ownership	Number of Shareholders	Number of Shares Owned	Shareholding
1 ~ 999	29,285	7,133,077	0.81%
1,000 ~ 5,000	21,015	47,712,417	5.39%
5,001 ~ 10,000	4,279	32,589,021	3.68%
10,001 ~ 15,000	1,438	17,540,465	1.98%
15,001 ~ 20,000	776	14,186,240	1.60%
20,001 ~ 30,000	690	17,225,742	1.94%
30,001 ~ 50,000	492	19,447,160	2.20%
50,001 ~ 100,000	328	23,320,904	2.63%
100,001 ~ 200,000	132	18,398,725	2.08%
200,001 ~ 400,000	70	20,730,982	2.34%
400,001 ~ 600,000	19	9,871,741	1.11%
600,001 ~ 800,000	12	8,841,376	1.00%
800,001 ~ 1,000,000	5	4,500,210	0.51%
1,000,001 and above	53	644,204,969	72.73%
Total	58,594	885,703,029	100.00%

1.5 Major Shareholders

April 13, 2019 unit: share

Quantity of shares / Major Shareholders	Total shares owned	Shareholding ownership %
Far Eastern New Century Corp	81,217,005	9.17%
Yuan Ding Investment Co Ltd	70,817,684	8.00%
Cathay Life Insurance Co Ltd	66,213,000	7.48%
Asia Cement Corp	63,766,522	7.20%
Yuan Tung Investment Co Ltd	49,705,396	5.61%
Fubon Life Insurance Co Ltd	33,287,000	3.76%
Yu Yuan Investment Co Ltd	33,224,017	3.75%
Kai Yuan Int’l Investment Co Ltd	32,473,173	3.67%
Ding Yuan International Co Ltd	27,365,495	3.09%
Tong Fu Investment Corp	13,753,554	1.55%

Note: 1. Top 10 shareholders
2. A total of 885,703,029 shares

1.6 Market Price, Net Value, Earnings and Dividends per Common Share Latest two years

Item / Year			2017	2018	From 1 Jan 2019 to 31 Mar 2019
Market price per share	Highest		33.10	36.30	26.07
	Lowest		19.95	24.60	24.20
	Average		26.04	30.76	25.88
Net value per share	Before distribution		16.98	17.17	17.68
	After distribution		15.21	(Note 1)	–
Earnings per share (Note 2)	Weighted average shares		871,949 thousand shares	871,949 thousand shares	871,949 thousand shares
	Before adjustment		2.01	2.01	0.22
	After adjustment		2.01	(Note 1)	–
Dividends per share (Note 1)	Cash dividend		1.75	1.75	–
	Stock dividend	From retained earnings (NT$)	–	–	–
		From capital surplus (NT$)	–	–	–
	Accumulated undistributed dividends		–	–	–
Analysis on investment return	Price/Earnings Ratio (Note 3)		12.96	15.30	–
	Price/Dividend Ratio (Note 4)		14.88	17.58	–
	Cash dividend yield (Note 5)		6.72%	5.69%	–

Note 1: The 2018 allocation of earnings is to be confirmed after approval at the general shareholders' meeting 2019.

Note 2: Based on the weighted average of outstanding shares and the quantity of shares after retroactive adjustment of earnings and recapitalization of capital surplus.

Note 3: Price/Earnings Ratio=Average Closing Price Per Share in current year/Earnings Per Share

Note 4: Price/Dividend Ratio=Average Closing Price Per Share in current year/Cash Dividend Per Share.

Note 5: Cash Dividend Yields=Cash Dividend Per Share/Average Closing Price Per Share in current year.

1.7 Dividend Policy and Implementation Status

1.7.1 Pursuant to the Article 34 of the Company's Articles of Incorporation, the Company's stock dividend allocation shall take into consideration of the changes in the outlook of Company business, and the life cycles of the various products or services, which have an impact on the future capital needs and taxation. Unless the need should arise for improvement of the financial structure and reinvestment, and production expansion or other major capital expenditure, the stock dividend shall be no less than 50% of the total net profit after tax and deduction of deficit compensation, legal reserve and special reserve, whereas the cash dividend shall be no less than 10% of the total of the shareholder bonuses distributed in the same year.

As of the example of the last three years, the cash dividend allocated have been in compliance with the Company's Articles of Incorporation, i.e. no less than 10% of the total shareholder bonuses distributed, such is as follows:

Unit: NTD per share

Year	Net earnings per share (A)	Cash dividend from retained earnings (B)	Cash dividend from capital surplus (C)	Total cash dividend (D)=(B)+(C)	Cash dividend distribution rate (B+C)/D
2016	(0.64)	0	0.20	0.20	100%
2017	2.01	1.75	0	1.75	100%
2018	2.01	1.75	0	1.75	100%

1.7.2 Dividend allocation proposal to be approved at the shareholders meeting 2019

The dividend allocation proposal resolved at the Board of Directors meeting at March 19, 2019 was to distribute NT$ 1.75 per share from the unappropriated earnings NT$1,549,980,300 after approval by the shareholders meeting.

1.8 Effect on Business Performance and EPS resulting from Stock Dividend distribution proposed by the 2018 Shareholders' meeting: N/A

1.9 Remunerations for Employees and Directors:

1.9.1 The numeral and range of the Board's remuneration according to the Articles of Incorporation of the Company

When there is profit at the end of the year, the Company shall distribute 1%-2% of the profit as remuneration for employees and no more than 1% as remuneration for Directors. However, should there be accumulated losses, the losses should be offset in advance. The remuneration for employee can be in stock or in cash. Its actual proportion, amount, form or number of stock shall be resolved at the Board of Directors' meeting, with consent of over half of the least two thirds of total Directors attendant, and be approved at the Shareholders' meeting. Same shall be applied to the remuneration for Directors.

1.9.2 Any discrepancy in accounting, between the estimated base and actual calculation and allocation of the bonuses and the stock dividends shall be transacted pursuant to the accounting estimation changes management and be adjusted into the following year.

1.9.3 The proposed 2018 remuneration allocation

The remuneration allocation approved by the Board meeting held on 19 March 2019 as below:

(a) The cash dividend/stock dividend to be allocated to employees and Directors are:

A. Employers: NTD31,973,230 to be distributed in cash

B. Directors: NTD15,986,615 to be distributed in cash

(b) The discrepancy, cause and treatment thereof, between estimation and actual allocation of bonuses to employees and Directors resolved at a meeting of the Directors: Nil

(c) Proposed percentage of employee stock dividend over the aggregate of earnings after tax and total employee remuneration: N/A

1.9.4 2017 remunerations to employees and Directors/Supervisors:

(a) Employees: Proposed remuneration to be allocated NTD31,958,357, actual allocation NTD31,958,357.

(b) Directors/Supervisors: Proposed remuneration to be allocated NTD15,979,178, actual allocation NTD13,000,000.

The balanced amount will be fully distributed by the following years.

1.10 Repurchase of Company Stock

None in the recent year and up to the date of publication of the annual report.

2. Issue of Corporate Bonds: Nil

3. Preferred Stock: Nil

4. Issuance of Overseas Depository Receipts: Nil

5. Employee Stock Options: Nil

6. Stock Issued for Mergers and Acquisitions: Nil

7. Implementation of Capital Utilization Plan

The issue or private placement of securities not yet completed in the quarter before the date of publication of the annual report, or plans completed in the recent three years with no return on investment: Nil

V. Operation Overview

1. Business Activities

1.1 Business scopes

1.1.1 The Company's business lines are stated as following:

C801010 Basic chemical industry
C801020 Petrochemical engineering raw material manufacture
C801060 Synthetic rubber manufacture
C801100 Synthetic resin and plastics manufacture
C802060 Animal medication manufacture
CB01010 Machinery & equipment manufacture
F107070 Animal medication wholesale
F107200 Chemical raw material wholesale
F113010 Machinery wholesale
F401010 International trading
I103060 Management consultation
I501010 Product design
IC01010 Drug inspection
JE01010 Leasing
C802041 Western medicine manufacturing
C114010 Food additives manufacturing
ZZ99999 Any business unprohibited or restricted by laws or regulations, except for those that require special permission

1.1.2 Weight of consolidated company operations

Currency unit: NTD thousand

	2017		2018	
	Turnover	Operation ratio (%)	Turnover	Operation ratio (%)
EG	23,948,919	77	26,793,969	79
Gas	1,683, 546	5	1,700,791	5
SC	5,598,082	18	5,448,345	16
Investment & others	44,234	–	17,648	–

1.1.3 Major business operations

(1) Manufacture and sale of MEG, EO and DEG, etc.
(2) Manufacture and sale of oxygen, nitrogen, argon and CO_2 and liquid gas products
(3) Manufacture and sale of specialty chemicals such as EA, EC, EB, AEO, PEG, MPEG, TA, and TM, etc.

1.1.4 New products under development

To meet with customers' requirements, the Company is developing the high value-added EO derivatives to be applied to functional textiles, UV cure monomers, PU, commodity chemicals and industrial auxiliaries, etc.

1.2 Industrial overview

1.2.1. EG

(1) Industrial overview and development

The polyester industry in China still relies on import of EG in bulk quantities each year. Although the output of EG in China exceeds 6,000,000 tons already, the demand of down-stream supplier still cannot be fulfilled currently, or in the near future. The import of EG is expected to be remained at 8,000,000 tons and above a year.

(2) Correlation between up-, mid- and down-stream

According to IHS, the total global demand for ethylene was about 160 million tons in 2018, of which about 15% was used for the production of EO and EG. The market supply in H1/2019 is expected to dwindle as Japan and Korea, the East Asia major exporting suppliers incline to adjust and prioritize their domestic needs by cutting short of the export; yet the import demand in China increase due to expansion of the downstream product lines; and, as the additional output capacity of the US and China crackers in H2/2019 are releasing, future ethylene supply is expected to be slack.

In 2018, the global consumption of EG was about 31 million tons, of which 87% was primarily used in polyester products, which are composed of chemical fiber, polyester for bottles and film slitter, etc.

(3) Overall economy, product development trend and competition

In accordance with the publicized info from the international economy forecast institution, the 2019 global economy and trading growth rate is expected to be at 3.5% as predicted by IMF, close to that of 2018, on account of the prices rebound of international crude oil and raw materials, and the US economy revitalizing policy, which will aid to the improvement of the global economy. However, the economy recovery in China remains slow due to the constant restructure of the industry resulted from the over-capacity market.

Though US shale gas technology exceeds in slashing costs of the ethylene down-stream derivatives, the production launch of most projects in such regard were procrastinated, in addition to the PE development for the first stage and the production launch of ethylene glycol by Q1/2019. China, on the other hand, has been working hard on the development of CTMEG, which still requires further improvement and refinement of technique to achieve quality. OUCC will adjust its EG output and continue developing high value-added EOD to raise its overall profit level to deal with the growing sufficient market of EG supply.

1.2.2 Gas

(1) Industrial overview and development

In H1/2018, the domestic gas market demand remained stable, being a prolonging market status from H2/2017. The GAS demand in H2/2018, however, decreased owing to the production reduction of the solar photovoltaic and the LCD panel industries affected by the fierce competition and stagnant demand in China.

In general, the 2018 gas industry in China stayed unsteady, under the global effect of the merge of Praxair and Linde and the 51% equity acquisition transfer of Baosteel Gases in China. The prices of liquefied oxygen and nitrogen of China Gas industry kept soaring as steel mills were forced to shut down for failing to comply with the environmental laws and regulations; while the market demand decrease 20% comparing to the previous year, on account of the price drop of the liquefied argon since lunar new year, the impact of China-US Trade War and the new policy on the solar photovoltaic, and so on.

Correlation between up-, mid- and down-stream

The Company's gas output not only meets the internal demands of its EG, EA and EC plants, oxygen and nitrogen from the Company are also supplied to customers in the Linyuan, Da Lin and Da Fa industrial parks, while the other liquid products are supplied to the electronics, petrochemical, medical care, food, steel and metal processing markets. In order to promptly respond to customer needs, the gas plant is equipped with a storage capacity of more than 10,500 tons of liquid gas, and installed in 2015 the remote liquid level metering /pressure transmission systems at the customers' end, stemming from which the smart dispatch vehicle system and the big data analytical system are to be developed in hopes of providing customers with more satisfactory and professional services.

The oxygen of Tong Da Industrial Gas (Yangzhou) Co. Ltd. is supplied to the Far Eastern Union Petrochemical (Yangzhou) Ltd. for the production of EO, and the nitrogen is supplied to the customers in the Industrial Zone thru pipelines, while liquid gas products, such as oxygen, nitrogen, argon and the like are sold to Air Liquide Shanghai as well as to the customers of the Eastern China.

(2) Overall economy, product development trend and competition

According to SEMI's 2019 forecast, the semi-conductor business shall be in decline, the gases demand from relevant electronics business tend to lessen. The slack economy at H2/2018 shall be carried over into H1/2019. The turnaround of gases business at H2/2019 will be counting on the global economy recovery should the trade war disputes ease off.

Therefore, the gas products sales strategies shall vary in accordance with different sales regions to cope with the price competitiveness resulted from the economic downturn in 2019.

1.2.3 SC

(1) Industrial overview and development

EA :

The consolidated companies' output capacity of EA totaled 100,000 tons, including 40,000 tons of EA from the Oriental Petrochemical (Yangzhou) Corporation, abbreviated as OPYC. The EA from OUCC Linyuan is commonly used by down-stream dealers for electronics solvents, detergents, resins, printing ink, textiles and cement, and is also exported to Asia-Pacific, Europe and the US. Amongst these, MEA provide a better and more adaptive supply of electronics solvents, while TEA users are now finally exempt from the restraining and complicated procedures for the import of CWC and can obtain a stable supply of raw material to further secure their competitiveness in the detergents, cosmetics and concrete additives industries on the international market. Domestic market demand for electronics solvents and cement additives in China remain stable. The global demand for EA is expected to total 1,970,000 tons in 2019, an increase of 2.1% over the 1,930,000 tons in 2018. The demand from China is about 400,000 tons. The Company will promote the high purity EA product for the semi-conductor cleansing clients in Asia to seek optimal profit.

EC :

EC is mainly used by polycarbonate (PC) producers as a raw material for compact discs and other composite plastics which make demand stable. The Company EC plant has been built with the largest annual production capacity in the world – 60,000 tons. The plant uses a non-phosgene environmental protective production process using its own EO and recycled CO_2 as feedstocks, by which means the Company is able to reduce its GHG emission, which is well recognized by the environmental protection institutions and society.

EBDB:

EBDB (Ethylene Glycol Butyl Ether) is applicable mainly to solvents for painting, printing ink, stamping ink, resin, as well as metal detergent, paint remover, lubricant remover, automobile engine detergent, dry-clean solvent, and epoxy resin solvent, etc. Market requirement remains stable. The Company is the sole producer of EBDB in Taiwan, with production capacity of 20,000 tons per annum.

EOD :

The Company's two EOD plants, of total consolidated output capacity 146,000 tons, locate in Linyuan and OPYC (Yangzhou) with respective output capacity of 800,000 and 660,000 tons. EOD products of the Company consist of AEO, which may be applied to synthetic detergents and formula, PEG to cosmetics, textile auxiliaries and electronic chemicals, MPEG and HPEG be used in concrete water reducers and paper pulp auxiliaries, TA as auxiliaries in pesticides and textiles, and TM used in UV curing resin, and other ethoxylates, all of which are primarily supplied to the down-stream commodity related industries such as detergents, electronic chemicals, synthetic resins, textile and cement additives. In recent years, the demand of EOD, as an important indicator to economic growth, has continued to boost in Asia, especially the emerging markets in China and South East Asia, following the escalating of the people's consumption level. In addition to the domestic market, the Company is also proactively developing overseas markets for EOD, and accomplished in succession the development of new series products such as special alcohol ether, polyol and others, to complete gradually the expansion of EOD product lines, so to increase operating income and profit.

The EOD plant of the Oriental Petrochemical (Yangzhou) Corporation is to mainly supply the China domestic market. Following the China economic development in the recent years, as the market demand has been focused on the expansion of its domestic requirement and the industrial upgrade, the OPYC has been proceeding with the development of other EOD products, besides its original AEO, to enhance the product competitiveness, which is to say the future of OPYC can be well expected.

(2) Correlation between up-, mid- and down-stream

EA :

With EO as its major feedstock, the cost of EA has become tightly linked to the ethylene market, the up-stream of EO. EA has a variety of applications, primarily as a surfactant in household detergents, electronics solvents, wood preservatives, taurine, insecticides and herbicides, textiles and cement auxiliaries. This is particularly the case in electronics solvents, and specialty chemical auxiliaries, fluorescent whitening agents, insecticides and herbicides and cement auxiliaries, which market demands have been stable. Besides the Taiwan and China markets, the EA products were sold to Asia Pacific, the Middle East, Africa and Europe, in terms of sales promotion.

EBDB:

With EO and n-butanol as raw materials, which cost is highly correlative to the market status of the up-stream ethylene and propylene, the main application of EBDB includes paint remover agent, lubricant remover agent, automobile engine detergent, dry-clean solvent, epoxy resin solvent and so on. The market requirement is stable. The Company is the sole producer of EBDB in Taiwan.

EC :

The Company EC plant is made with safe, eco-friendly and competitive production process using its own production of EO and recycled CO_2, and mainly produced to satisfy the stable demand of the down-stream PC supplier, Chi Mei.

EOD :

With EO as a self-supply feedstock, others as fatty amine and methanol were also purchased as feedstock for production. EOD is widely used by mid- and down-stream markets as commodity chemicals, textile auxiliary, medicine, construction, resin paint and electronics.

(3) Overall economy, product development trend and competition

EA :

For the time being, the Company is the only domestic producer of EA, whose feedstock EO is also from own production, which makes the product very competitive. The stable demand for EO by the electronics industry in Taiwan, results in the Company owning a 60% share of the domestic market. The Company's future marketing strategy is to enhance domestic market share as well as exports to Asia, Europe and America. The Company’s primary rivals include Nippon Shokubai (Japan), Optimal-Petronas (Malaysia), Thai Ethanolamines (Thailand), Sabic and Sadara (Saudi Arabia), and some other manufacturers in China, Europe and America. The Company's sales objective of 2018, besides enhancing marketing through domestic and overseas channels to maintain stable demand and supply relations, it also aimed at striving to upgrade its EA product to semi-conductor level with high value to survive the extreme competitive market creating better profit with value differential marketing strategy.

On other hand, the EO feedstock of OPYC relies on the supply from Far Eastern Union Petrochemical (Yangzhou) Ltd. Though the demand for EA in China continues to grow, the EA market is being overrun by competition. To achieve a higher production rate and reduce cost, it is necessary to secure a sustainable relationship between supply and demand.

EC :

Due to the stable market demand for PC, EC is under steady development. Despite of PC, EC can also be applied to electrolyte of lithium battery, diesel additive, polyether polyols for PU, and so on. With its strength in safe production and eco-friendliness, EC development is with great potential.

EBDB :

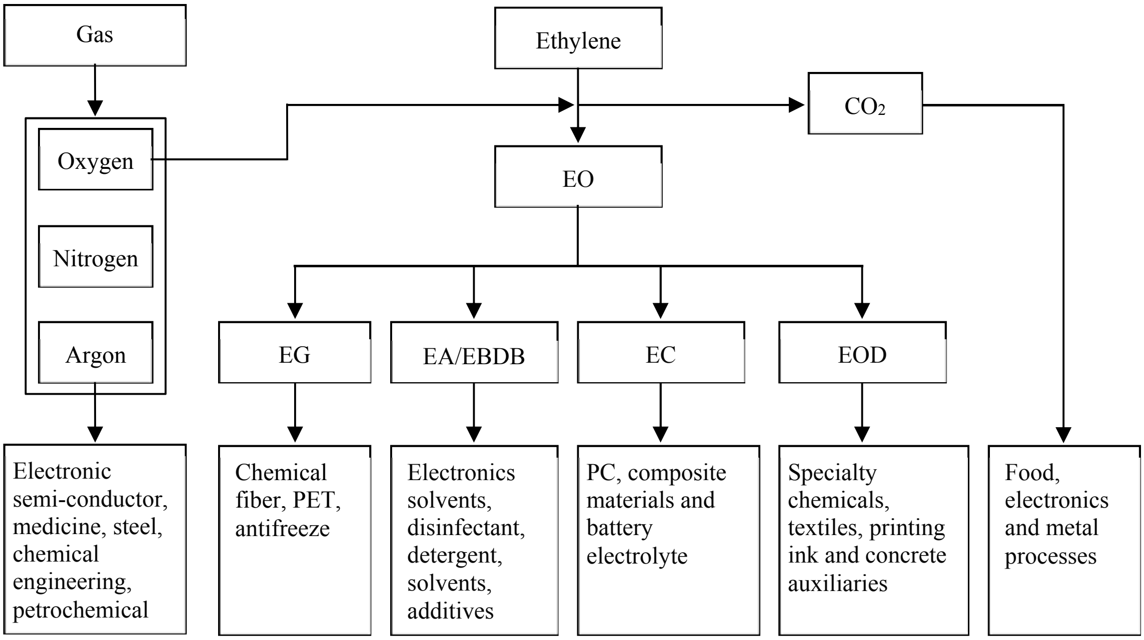
With EO and n-butanol as raw materials, EBDB is widely used as solvents with mid to high boiling point, which covers paints, printing ink, stamping ink, resin solvents, metal detergent, paint remover, lubricant remover agents, automobile engine detergent, dry-clean solvent, and epoxy resin solvent, etc.

EOD :

The cost advantage of EOD plant due to self-owned feedstock EO and advanced processing equipment has resulted in high quality product with far lower than average impurity content and strengthened market competitiveness. Given that the domestic market scale is small and restricted, current EOD is prioritized to be steadily supplied to domestic customers of down-stream, then to be exported to South East Asia, New Zealand and Australia, etc. On account of the rapid growth in China economy, EOD product demand in commodity remains growing followed by the booming of consumption capability. However, the market becomes over supplied as new capacity continues to launch, and more imported products from abroad with much lower cost have joined in to compete and decreased the margin thereof.

EOD plant of OPYC shall remain high operation rate to endeavor in marketing, developing new products as well as new customers, and expanding EOD business territory to enhance overall competitiveness.

(4) Industry overview



1.3 Technology and R&D overview

The Company has always highly valued R&D, and allots a substantial yearly budget for the purpose. The R&D expenditure in 2018 was 172,538 thousand NTD, 144,604 thousand NTD in 2017, and 37,782 thousand NTD in Q1/2019.

With EG as the Company's prime product and EO as its precursor, which of the latter is not easy to store or transport, the Company has since concentrated on the development and production of EO derivatives. Given the risk of the economic circulation of raw material to a commodity such as EG, the development of EOD has become a top priority for OUCC as its transformation into a Specialty Chemical company, based on the premise of diversified business and risk management. Among the customized EOD products newly launched in 2018, there are the long-chain alcohol ethoxylated propoxylated (SL, SX series), styrylphenol ethoxylated (DSP, TSP series), Guerbet C10 alcohol ethoxylated/propoxylated (DP, DPY series), non-regulated polyether (BT50H, DG75H, L775H, MT75H series), terephthalic acid & polyethoxylated (CMB, CHB, PHB series), which are nonionic surfactants related, with excellent functions for moisturizing, infiltration, emulsification, dispersion and cleansing, etc., which were further developed as specific products with features of low foam, low pour point, low scent and biodegradability, and have all been well reviewed by down-stream customers. More optimal EOD new products will be customized based on current foundation to fulfill customers' requirements. The new model synthesis and development of the concrete additives (water reducing/collapse/coagulation) is proceeding currently, and a successful product launch shall be expected in 2019.

In view of the booming development of polyurethane (PU) in Taiwan, which of its soft segments comprise polyether polyol, the company, in line with its goals in producing fine chemicals of high value-added, has developed self-owned technology for polyether polyol of special specifications, which include PPG, GL and EO-PO copolymer series, which molecular weights with range between 230-20000 may easily adapt to particular requirements of PU applications in adhesives, sealants, elastomers, hardened and softened foams, the mentioned series are expected to launch production in 2019.

1.4 Long- and short-term business development plans

1.4.1 EG operations

Short term: To elevate current equipment reliability and production rate to satisfy domestic market demand.

Long term: To evaluate and plan for the security of energy resources in the territory where the energy is competitive, with the aim of expanding the core business base.

1.4.2 GAS operations

Short term: (1) To continue expanding gas business in Linyuan Industrial Park through extended pipeline.

(2) To develop customers of various fields to cope with the risks from the cyclic impact on the industry.

Long term: To review the industries' development trends to establish new gas business requirements.

1.4.3 SC operations

Short term: The Company will enhance business operations with end users, infuse new products into the market, and strengthen technical service ability to increase its market share, in addition to reinforcing cooperative relation with international leading manufacturer to administer the improvement of its brand exposure, while maintaining strategic collaborative partnership in developing customization of other down-stream EO derivatives to be mutually competitive through collaborative supply chain.

Long term: To proceed with plans for the diversified development of new SC and fine chemicals to enlarge the sales weight of the SC operations.

2. Sales and Marketing Overview

2.1 Market Analysis

2.1.1 Major products vs sales territories vs competitors and market share

(1) EG :

The MEG, DEG and EO from the EG plant were primarily produced for the domestic market. The domestic market share of EG is 20%.

(2) GAS :

The sale of industrial gas is also mainly for the domestic market. Domestic market share is 8%.

(3) EA :

The main sales territories for EA include Taiwan, Asia Pacific, the Middle East, Africa, Europe and America.

The EA of the Oriental Petrochemical (Yangzhou) Corporation primarily sells to Eastern China, where the market demand is the largest and customs duty and freight make imported product less competitive.

(4) EBDB :

The current sales territories of the Company's EBDB are in Taiwan, China, Asia-Pacific, and Africa, etc.

(5) EC :

The EC supplied to Chi Mei for the production of PC is primarily used as advanced plastic materials for compact disks. As the two PC production lines of Chi Mei under good operation, the development continues, and the consumption of EC may remain growing.

(6) EOD :

The AEO, PEG, MPEG, HPEG, TA, and TM from the EOD plant have extensive application and accounted for the 30% of domestic market share in 2018. Apart from the domestic market, the EOD products were also exported to China, and South East Asia. Overall market share was 50%.

The AEO, PEG and MPEG from the OPYC EOD plant goes mostly to Eastern China, while the rest goes to Northern and Southern China. Currently, the overall market share of EOD is 5%.

2.1.2 Future market overview

(1) EG :

The total domestic output was approx. 2,450,000 tons, imports 150,000 tons, exports 1,400,000 tons, and domestic demand 1,200,000 tons in 2018. The demand in 2018 was 200,000 tons more than that of 2017.

(2) EO :

The demand for EOD grows by 3% or more each year. The Company's EO fulfills internal demand for EA, EC, and EOD.

(3) DEG :

The domestic demand is approx. 50,000 tons, while the supply is more than 100,000 tons. Export is necessary for the balance of DEG domestic market.

(4) GAS :

The Company competes with Air Products San Fu, Linde LienHwa, Air Liquide Far Eastern and Taipei Oxygen and Gas. In 2019, the Company will expand business ratio and area through extended pipeline, and develop new gas product applications to extend business operations and increase profit.

(5) EA :

As the sole domestic manufacturer of EA, 60% of production volume goes to the domestic market, which used to rely totally on imports. The remaining 40% will be exported to Asia Pacific, Africa, Europe and America.

(6) EBDB :

As the sole domestic manufacturer of EBDB currently, 40% of production volume goes to the domestic market, which used to rely totally on imports. The remaining 60% will be exported to China, Asia Pacific, and Africa.

(7) EOD :

With diversified down-stream applications to household industry such as detergent, textile auxiliary, coating resins, concrete water reducers, and so on, future growth of EOD is expected to follow the pace of economic development. The Company is seeking long-term cooperation with leading SC manufacturers to further expand its domestic market share and increase export volume; 50% of production will go to the domestic market and 50% to China, South East Asia and the Middle East.

2.1.3 Advantages/Disadvantages and Countermeasure in Competitiveness and Future Development

(1) Advantages :

(a) With the highly efficient catalyst now in use, the efficiency of the EG plant has been improving remarkably each year resulting in the saving of feedstock ethylene and oxygen as well as energy consumption. In addition, the high-purity EO production equipment is not only used to produce EA and EC, but also for the newly developed high value-added EOD.

(b) With the steady domestic demand for oxygen to stabilize production costs, the gas remains unaffected by the external economy which is a unique situation amongst domestic gas producers.

(c) To effectively reduce energy consumption, improve the quality and competitiveness of the product, EA plant No. 2 has adopted newly developed low water revamp process.

(d) Due to that TEA is under the control of CWC of the United Nations and domestic production has relieved local TEA users of the almost inextricable and complicated import application procedures, the domestic demand and supply continue to grow.

(e) In addition to its use as feedstock for electrolyte of lithium battery and composite material, the production of EC under the environmentally protective non-phosgene process and the use of GHG CO_2 as feedstock, have earned the recognition of society and environmental conservation institutions. EC is supplied under contract to satisfy the down-stream Chi Mei's PC marketing requirement.

(f) The cost advantage of EOD plant due to self-owned feedstock EO and advanced processing equipment has resulted in high quality product with far lower than average impurity content, which is highly regarded by the customers. Additionally, with high capabilities in product development and technical service, the Company enables to meet with customers' requirements for new product development

(2) Disadvantages and countermeasures :

(a) With CPC as major supplier of ethylene, import is necessary when there is a shortage.

(b) To deal with the disadvantages of the costly transportation, the Company is working on the installation of an optimizing transportation dispatch system to ensure stable and secure supply.

2.2 Applications and production processes of the major products

2.2.1 Applications of major products

(1) MEG: this is the raw material for polyester fiber, antifreeze, dehumidifiers, engineering plastics, PET bottles and brake fluid.

(2) DEG: is the raw material for dehumidifiers, lubricants, dye leveler, polyethyl urethane and unsaturated polyester resins as well as a solvent and grinding aid.

(3) EO: is the major feedstock for EG, glycol ether, EA and non-ionic surfactants and disinfectants.

(4) Oxygen: is used in the aerospace industry, metal processing, the papermaking and glass industries, chemistry and pharmaceuticals, industrial welding and cutting, waste water treatment, incineration, hospitals and fisheries, etc.

(5) Nitrogen: is mainly used in refineries, the glass, electronics and semi-conductor industries, the plastics industry, in food preservation and packaging, low-temperature cutting, the chemical industry, metal heat treatment, pharmaceuticals, low-temperature surgery, in printing, metal, rubber and livestock industries as well as in medical research.

(6) Argon: is used in welding, the aerospace industry, lighting, window heat insulation, the electronics and semi-conductor industry, the metal and alloy manufacturing industry and in laser production and the processing industry.

(7) CO_2: is used in welding, fire extinguisher, electronics and semi-conductor industries, frozen foods and dry ice cleaning, etc.

(8) MEA: is used in disinfection, anti-diarrheic, fluorescent whitening agents, surfactant, anti-corrosive agent, detergents, paints, and in acid gas absorbent and electronics solvent.

(9) DEA: is used in insecticides and herbicides, corrosion inhibitors, crosslink agent, engine antirust agent, detergents, surfactant, and in acid gas absorbent.

(10) TEA: is used for cutting, cooling and anti-corrosion agents in metal processing; emulsion and neutralization in the cosmetics industry; as a grinding aid in cement processing; as a concrete water reducer, and as a surfactant and electroplate bonder.

(11) EC: is used in the production of PC which is then used for the production of compact discs and other engineering plastics.

(12) EBDB: is used in paints, printing ink, stamping ink, resin solvents, metal detergent, paint remover, lubricant remover agents, automobile engine detergent, dry-clean solvent, and epoxy resin solvent, etc.

(13) PEG: is used as a fluorescent brightener in electroplating; in moistening and concentration for cosmetics; as a soldering flux, and as a mold release agent in rubber processing.

(14) AEO: is a shampoo ingredient, a lubricant and anti-corrosion additive; is used in textiles; is a moisturizer or dispersant used in the preparation of colored dyes and pesticides; also used as a stabilizer in synthetic latex processing.

(15) MPEG: is extensively used in construction, as a raw material for poly-carboxylate cement water reducers, as a thickening agent and lubricant in textiles and specialty chemical processes. It is also used as a pharmaceutical substrate for emulsifying ointment, as a rinsing agent and in suppositories.

(16) TA: is non-ionic in an alkali or neutral mediator, and cationic in an acid mediator. They have excellent emulsification properties. Extensively used in pesticides, the leather and textile industries, metal processing and plastics industry, such as textile auxiliary, pesticides emulsifiers and metal anti-corrosion agents.

(17) TM: Ethoxylated Trimethylolpropane is a tri-functional alcohol with quaternary structure and is a colorless transparent liquid at normal temperatures. TM is frequently used as a cross linker in polyurethanes, a precursor for UV curing coating reactive monomers and a composition of aqueous polymer.

2.2.2 Production processes

(1) EG plant: After preheating, ethylene goes through the sulfur removal and acetylene removal units and is injected into the recycle gas loop, oxygen is also injected before it is passed over the silver catalyst where ethylene and oxygen react to form ethylene oxide (EO), carbon dioxide (CO_2) and water. The EO absorbed by the gas and recycling water in the main absorbing column is then pumped to the gas stripping column and EO recovery system to produce crude EO. Part of this is purified to high purity EO in the HPEO column by removal of aldehydes while the rest of the crude EO is mixed with process water and reacts to glycols in the glycol reactor. The glycol water mixture passes through multiple effect evaporators to remove water. The concentration and purification columns remove impurities to produce high quality mono-, di-, and tri-ethylene glycol (MEG, DEG, TEG) products.

(2) Air separation plant: Air is filtered to remove particulates and dust, compressed by the main air compressor passed through molecular sieves to remove water, CO_2, and light hydrocarbons by adsorption. The purified dry air passes through primary heat exchangers to reach liquefying temperature and enters the fractionation column where it is split into high purity oxygen (O_2), nitrogen (N_2) and argon (Ar). Liquid products (LO_2, LN_2, LAr) are produced by compression-expansion of the gaseous O_2/N_2/Ar in the liquefiers.

To secure the quality control of medical GOX and LOX, the medical oxygen has been produced through dedicated singular-use pipeline since April 2009.

(3) EA plant: EO reacts with ammonia water to produce ethanol-amine solution. The solution goes through ammonia, water removal and vacuum distillation processes to produce mono-di-, tri- ethanol amines (MEA, DEA, TEA) and heavy TEA (TEAH) products.

(4) EC plant: EO and CO_2 react in the high pressure reactor to produce ethylene carbonate (EC), during which reaction the liquid EC is catalyzed and proceeds with vacuum distillation to reach high purity.

(5) EOD plant: EO reacts with various initiators such as methanol, natural fatty alcohol, synthetic alcohols, DEG, methallyl alcohols, fatty amine, trimethylopropanol, benzene ring and so on in the high pressure autoclaves to produce different Ethoxylates (AEOs, TDK/TDE, MPEG, PEG, HPEG, TA, TM, PH1 and TSP series). The batch reaction process undergoes catalyst addition, moisture removal, reaction, curing and neutralization steps in the facility which includes pre-treatment, reaction and post treatment vessels.

(6) To produce the Ethylene Glycol Butyl Ether, the butanol is to react with EO to produce glycol ether solution. Then, through the processes of butanol removal and the vacuum distillation there come the ethylene glycol butyl ether (EB), diethylene glycol butyl ether (DB), and triethylene glycol butyl ether (TB), etc. Starting 2018, the developed products of the de-salt series, the mixtures of poly ethylene glycol butyl ether (HB) and triethylene glycol monobutyl ether (TBK) and the like provide outstanding functions to EBDB series in applications of solvents and non-ionic surfactants.

2.3 Supply of major feedstock

2.3.1 Major feedstock of the EG Plant:

(1) Ethylene: is primarily supplied by CPC in Taiwan. Any shortages are covered by imports mainly from North East Asia and the Middle East.

(2) Oxygen: supplied by the Company gas plant.

2.3.2 Gas feedstock is atmospheric air.

2.3.3 Feedstock of the EA plant:

(1) EO: Supplied by the OUCC EG plant. OPYC is supplied mainly by Far Eastern Union Petrochemical (Yangzhou) Ltd. in 2018, while the rest is provided by local suppliers.

(2) Liquid ammonia: OUCC is supplied by the Taiwan Fertilizer Co. OPYC is from the local producer.

2.3.4 Feedstock of the EC Plant: the EO and CO_2 are both provided by the Company EG plant.

2.3.5 Feedstock of EBDB Plant: the EO is provided by the Company EG plant, while n-butanol is provided by Formosa Plastics Corporation, shortage by importers.

2.3.6 Major feedstock of the EOD plant:

(1) EO: from the OUCC EG plant. OPYC is supplied mainly by Far Eastern Union Petrochemical (Yangzhou) Ltd. in 2018, while the rest is provided by local suppliers.

(2) Fatty alcohols: OUCC is supplied by the Kao Group or other importers. OPYC is from Eastern China supplier.

2.4 The major suppliers and customers over the last two years

2.4.1 The major suppliers over the last two years

(Unit: NTD1,000)

	2017				2018				Ending Q1 of 2019			
Item	Name	Amount (Note1)	Percentage of total net purchase [%]	Affiliation with the issuer	Name	Amount (Note1)	Percentage of total net purchase [%]	Affiliation with the issuer	Name	Amount	Percentage of total net purchase up to Q1 of the current year [%]	Affiliation with the issuer
1	MITSUI & CO LTD	5,186,472	23	N/A	MITSUI & CO LTD	6,243,092	22	N/A	CPC	1,237,494	20	N/A
2	CPC	4,771,166	21	N/A	CPC	5,728,533	21	N/A	MITSUI & CO LTD	1,027,844	16	N/A
3	Mitsubishi Corp	2,496,176	11	N/A	Mitsubishi Corp	4,085,251	15	N/A	Mitsubishi Corp	716,255	11	N/A
4	Others	9,982,206	45		Others	11,760,138	42		Others	3,347,090	53	
	Net purchase	22,436,020	100		Net purchase	27,817,014	100		Net purchase	6,328,683	100	

Note 1: Suppliers accounting for 10% or more of the Company’s total purchase amount over the last two years, and the respective purchase amount and percentage.

2.4.2 The major customers accounting for 10% or more of the Company’s total sales amount: N/A

2.5 Output volume and value over the last two years

Unit: quantity: ton
Value: NTD thousand

Major products	2017			2018		
	Productivity	Output	Output value	Productivity	Output	Output value
EG series	1,374,000	903,914	24,195,015	1,374,000	942,755	26,177,420
Gas series	1,797,950	1,040,589	1,691,135	1,797,950	1,034,630	1,632,761
SC series	331,000	183,932	5,569,166	331,000	166,189	5,137,820

Note: Output volume and value of consolidated companies

2.6 Sales volume and value over the last two years

Unit: quantity: ton
Value: NTD thousand

Year	2017				2018			
	Domestic sales		Export sales		Domestic sales		Export sales	
Major products	Q’ty	Amount	Q’ty	Amount	Q’ty	Amount	Q’ty	Amount
EG series	356,959	9,913,201	501,485	14,035,718	374,601	10,797,302	542,863	15,966,667
Gas series	659,644	1,409,830	104,969	273,716	653,192	1,420,812	104,504	279,979
SC series	82,407	2,549,465	96,491	3,048,617	75,576	2,641,611	88,779	2,806,734

Note: Sales volume and value of consolidated companies

3. Employees

May 15, 2019

Year		2017	2018	2019(Note)
Number of employees		665	672	660
Average age		38.73	39.21	39.63
Average seniority		9.18	9.42	9.79
Education Background %	Doctor degree	1.05%	1.04%	1.06%
	Master degree	14.44%	15.92%	16.06%
	College	67.97%	67.86%	67.88%
	High School or below	16.54%	15.18%	15.00%

Note: The information of consolidated companies is valid up to the date of publication of the annual report.

4. Environmental Protection Expenditure

4.1 Incurred loss and punishment due to contamination of environment in recent year

1. Linyuan premises

Item \ Year	2017	2018	Ending 15 May, 2019
Contamination classified	Air Pollution Rule	Air Pollution Rule, Waste Disposition Rule	Air Pollution Rule
Authorized Unit	Kaohsiung City Government	Kaohsiung City Government	Kaohsiung City Government
Compensatory amount or discipline	NTD300,000	NTD300,000	NTD200,000
Other losses	N/A	N/A	N/A

2. Yangzhou premises

Item \ Year	2017	2018	Ending 15 May, 2019
Contamination classified	N/A	Solid Waste Disposition Rule	N/A
Authorized Unit	N/A	Yizheng City Environmental Preservation Bureau	N/A
Compensatory amount or discipline	N/A	RMB180,000	N/A
Other losses	N/A	N/A	N/A

4.2 Environmental protection management

4.2.1 Operator permit application for anti-pollution facility :

The Company Linyuan premises has acquired a fixed pollutant operators permits for 7 production processes pursuant to the Law. Oriental Petrochemical (Yangzhou) Corp. premises has acquired the local pollutant emission permit pursuant to the Law.

4.2.2 Water pollutant emission: The Company and the Oriental Petrochemical (Yangzhou) Corp. and Far Eastern Union Petrochemical (Yangzhou) Ltd. have installed waste water treatment yards that comply with the government emission standards, and the emission is discharged to the respective joint waste water treatment plant of the industrial park.

4.2.3 Dedicated environmental protection personnel:

(1) Personnel dedicated to air pollution: Three Class-A dedicated workers are delegated.

(2) Personnel dedicated to water pollution: Two Class-A dedicated workers and two Class-B workers are delegated.

(3) Personnel dedicated to toxic substances: The Company has delegated four trained competent Class-A workers dedicated to toxic substances.

(4) Personnel dedicated to waste goods: The Company has delegated one Class-A dedicated worker.

(5) The Oriental Petrochemical (Yangzhou) Corp. has retained three workers who have been conferred the environmental protection management personnel certificates by the provincial government in China and ten workers who have been conferred the environmental protection operator permits by the city government in China.

(6) The Far Eastern Union Petrochemical (Yangzhou) Ltd. has retained 11 workers who have been conferred the waste water disposal certificates of the national vocational qualification level V.

4.2.4 The Company has acquired ISO-14001certification (Environmental Protection Management) as well as OHSAS-18001certification (Occupational Safety & Health Management), and implements the measures according to the relevant system. Oriental Petrochemical (Yangzhou) Corp. passed also the mandatory clean production inspection.

4.2.5 Anti-pollution equipment: The Company installed two sets of RTO (Regenerative Thermal Oxidizer), one set of DFTO (Direct Fired Thermal Oxidizer), and one set of CO (Catalytic Oxidizer), while Oriental Petrochemical (Yangzhou) Corp. installed two scrubbing towers. All emission concentration appeared normal. Far Eastern Union Petrochemical (Yangzhou) Ltd. installed one set each of DFTO (Direct Fired Thermal Oxidizer) and CO (Catalytic Oxidizer).

4.3 Future countermeasures and expenditure

4.3.1 To be adopted plan and countermeasures:

(1) To strengthen the operation management of the anti-pollution facility, to ensure the compliance of pollutant emission pursuant to the regulation.

(2) To enhance the operative capability of the anti-pollution facility by monitoring the management of operation and maintenance, to eliminate the occurrence of accident.

(3) To promote the industrial waste reduction plan, to diminish the generation of waste water/gas/good, through development and improvement of technology in processing.

(4) Review and advance all the measurements for water and energy saving, and CO_2 reduction.

4.3.2 Future and on-going expenditures in environmental protection and the improvement anticipated

(1) The Company is investing NTD147.5 million in the paving and rain/sewage diversion modification, and waste water recovery projects in Linyuan, which is expected to prevent the cross contamination of mixing rain/sewage/soil and reduce 70% of the waste water disposal.

(2) The Company is investing NTD45 million in the replacement of the hot coal heating boiler of the EOG plant with natural gas burner, and the use of natural gas instead as fuel for the regenerative thermal oxidizer (RTO) to reduce the GHG emission by means of the disuse of diesel pump.

(3) The Oriental Petrochemical (Yangzhou) Corp. is investing RMB 500,000 to install a deodorization system to centralize the anaerobic pool exhaust and treat with activated carbon absorption to well improve the deodorization of the anaerobic pool at the waste water treatment station.

4.4 Implementation of GHG reduction

4.4.1 Implementation

(1) The installment of frequency converters to the 1st and 2nd water tower fan motors of the EOG plant, which has saved 444,000 kWh of electricity and reduced 246t-CO_2e a year.

(2) The termination in the usage of the cooling water pumps of EOD plant, which has saved 2.28 million kWh of electricity and reduced 1,266t-CO_2e a year.

(3) The lithium bromide (LiBr) double effect absorption chilling water system of EOG plant was completed in October 2018 and activated in January 2019. After a revamp scheduled in May 2019, the steam consumption is expected to save 27,500 tons and reduce 6,330t-CO_2e a year.

(4) The PP-1208D of cooling water pump shell/fan ceramic coating saved 80,000 kWh of electricity and reduced 45t-CO_2e a year.

(5) The manufacturing processes readjustment of the EOD plant by terminating the use of recycling pumps (P2-501, P6-501, P7-501) has saved 972,000 kWh of electricity and reduced 538t-CO_2e a year.

(6) The replacement of centrifugal pump for PO output of EOD plant with dosing pump has saved 120,000 kWh of electricity and reduced 67t-CO_2e a year.

(7) The manufacturing processes readjustment of the EC plant by terminating the use of recycling CO_2 liquid pump of the CO_2#3 has saved 856,000 kWh of electricity and reduced 474t-CO_2e a year.

4.4.2 Proceeded measures

(1) To readjust the intake volume of cooling water of EOG plant, and terminate the use of cooling water pumps to save approx. 6 million kWh of electricity and reduce 3,300t-CO_2e a year.

(2) To expand the sales volume of the CO_2 of food and electronic grades to increase the recycled CO_2 volume, i.e. to reduce 20,000t-CO_2e and up a year.

(3) The replacement of the hot coal heating boiler of the EOG plant with natural gas burner, and the disuse of diesel pump replaced by natural gas as fuel for the regenerative thermal oxidizer (RTO) will lessen diesel consumption for 650 kiloliters and reduce 1,700t-CO_2e a year.

(4) The installment of frequency converters to the pumps of EA plant 300 zone is expected to save 110,000 kWh and reduce 61t-CO_2e a year.

(5) To build a cogeneration system, which may generate estimated 50MW of electricity, achieving 80% of self-sufficiency in power and 100% in steam, and improving energy efficiency scope by reducing up to 120,000t-CO_2e and up in two years.

4.5 The implementation of RoHS and its effect on investors' interests and rights:

The Company has confirmed that no lead or cadmium ever used as ingredient, or in formula or processing pursuant to RoHS.

5. Labor-Management Relations

5.1 Employee fringe benefits and implementation:

5.1.1 The Company has established the Worker’s Welfare Commission and contributes to welfare benefits in accordance with the Law, calls meetings periodically, attends to worker welfare affairs and organizes various welfare activities. Badminton, softball and fishing clubs have been founded, academic subsidy and travel allowance are provided, and annual health examination for all employees is provided as well as an employee group insurance scheme.

5.1.2 Continuing education and training

The Company values the training and development of human resources, and supports and invests in employee education and training. This improves expertise and skill and upgrades Company efficiency and competitiveness. The Company plans and provides employees with the chance to continue their education and training each year by attending competency and executive management talent development programs. These include financial accounting, marketing and computer courses planned by the HR Development Center of Far Eastern New Century Corp, a Group member. The various departments may also recommend that colleagues attend on-job training, labor safety training and training for licenses organized by the governmental apparatus and social organizations. These internal education and training seminars will be continued to enrich employee expertise and achieve the substantial goal for “to learn in order to practice”. In 2018, the total number of internal and external education training hours was 7,835.

5.1.3 Retirement system

The Company has established a Labor Pension Supervisory Committee to review and monitor the utilization of pensions. The Committee will contribute the pension reserve into a special and exclusive account maintained at the Trust Dept of the Bank of Taiwan, on a monthly basis and pay employee pensions as required to ensure the interests and rights of retired employees.

As of July 1, 2005, employees who chose the pension system under the “Labor Pension Act” shall pay a deposit of 6% of the insured value to the personal pension account at the Labor Insurance Bureau on a monthly basis.

5.1.4 Labor-management agreements and employee interests and rights protection measures

The labor-management policies are made in accordance with the relevant laws and regulations and implemented fairly. Additions or amendments to the labor terms and conditions may be implemented after labor-management negotiations to protect the interests and rights of the employees.

5.2 Labor-management disputes and response

The Company management rules and systems are well-founded. All measures will be executed in a fair and reasonable manner. The employees may express their opinion and seek communication and resolution of any disputes through the periodic worker-management meetings. Both the workers and management may interact peacefully in the spirit of coexistence and mutual prosperity.

5.3 The work environment and employee personal safety protection measures

5.3.1 To prevent occupational accidents and disasters and protect the safety of employees, the Company has defined various "urgent contingency plans" and carries out regular drills and has reactive measures in place to handle fire, leakage, typhoon, earthquake, war, traffic accidents, reporting, evacuation and recovery, and to limit and mitigate injury and loss caused by an accident or disaster as far, as fast, and as systematically as possible

5.3.2 The substance safety data sheets for raw materials, supplies and products throughout the factory are accessible to personnel at all times, as well as being posted on-line. This ensures that all personnel have the knowledge, references and the relevant information necessary to take the proper corrective action to ensure the safety of employees and the factory.

5.3.3 The production process zones are all equipped with such fire protection equipment and sprinkler systems which may be automatic, manual or remote controlled to ensure the safety of employees and the factory. Auto fire extinguishing systems (F-200) are installed at the 14 sets of MCC to secure the safety of the electronics facility.

5.3.4 Monitoring stations for combustible gas, EO, NH3, H2, and waste water (COD, pH) are installed inside the production areas, so that any leakage or abnormal situation may be detected and remedied or eliminated immediately.

5.3.5 A hot/hazardous work permit procedure has been established and a permit system and procedure for entry into confined spaces has also been introduced to ensure the safety of personnel and equipment.

5.3.6 Safety training for contractors and the safety training requirement for each of their employees have been introduced to ensure the safety of all personnel accessing or passing through the factory area.

5.3.7 Health examinations for employees have been set up for the early detection of any health problems so that any necessary treatment may be given as soon as possible.

6. Major contracts

Nature	Client	Duration	Summary Content	Restricted clause
(I) Oriental Union Chemical Corporation				
Supply Contract	Far Eastern New Century Corporation	2016.3-2019.2	EG purchase and sales agreement	Renewed automatically within six months prior to expiration if neither raises an objection.
	Shinkong Synthetic Fibers Corporation	2019-2021		Renewed automatically within six months prior to expiration if neither raises an objection.
	Tainan Spinning Co Ltd	2018, 2019		Renewed automatically within three months prior to expiration if neither raises an objection.
	Sino-Japan Chemical Co Ltd	2016.6-2019.6	EO purchase and sales agreement	Renewed automatically for three years within six months prior to expiration if neither raises an objection.
	Chi Mei Corporation	2016-2020	EC purchase and sales agreement	Both parties are engaged in the exclusive purchase and sale of EC.
	CPC	2018, 2019	Ethylene supply contract	N/A
	Mitsubishi Corporation (Taiwan) Ltd	2018, 2019		N/A
Lease Contract	CPC	2018, 2019	Storage tank lease contract	N/A
	Lushun Warehouse Co Ltd	2018.3 | 2018.12		Renewed automatically for one year within three months prior to expiration if neither raises an objection.
Long-term Loan	Hua Nan Bank	2018-2020	Bank loan	N/A
	Chang Hwa Bank	2018-2020		
	Bank of America	2018-2020		
	Sumitomo Mitsui Banking Corporation	2018-2020		
	Far Eastern International Bank	2018-2021		
	Mega Bank	2018-2020		
	O-Bank	2018-2020		
	Land Bank of Taiwan	2018-2020		
	CTBC Bank	2018-2020		
	KGI Bank	2018-2020		
	Shanghai Commercial & Savings Bank	2018-2020		
(II) Pacific Petrochemical (H) Ltd				
Long-term Loan	KGI Bank	2018-2020	Bank loan	N/A
(III) OUCC (Bermuda) Holding Ltd				
Long-term Loan	KGI Bank	2018-2020	Bank loan	N/A
	Sumitomo Mitsui Banking Corporation	2018-2020		
(IV) Oriental Petrochemical (Yangzhou) Corporation				

Nature	Client	Duration	Summary Content	Restricted clause
Supply Contract	Far Eastern Union Petrochemical (Yangzhou) Ltd	2018, 2019	EO supply contract	N/A
	P&G	2018, 2019	Fatty amine supply contract	
Sales Contract	Prior (Shanghai) Co Ltd	2018, 2019	EA purchase & sales agreement	N/A
	Zanyu Technology Group	2018, 2019.3	OEM agreement	
	Jintung Petrochemical Corp Ltd	2018, 2019		
Long-term Loan	CTBC Bank, Shanghai Branch	2019-2021	Bank loan	N/A
(V) Far Eastern Union Petrochemical (Yangzhou) Ltd				
Supply Contract	Petrochina Kunlun Gas Co Ltd	2018, 2019	Gas supply contract	N/A
	Mitsui & Co	2018, 2019	EO supply contract	
Sales Contract	Shanghai Lianghong Int'l Trading Co Ltd	2018	EG purchase & sales agreement	N/A
Long-term Loan	Banks of syndicated loan	2014-2019	Bank loan	N/A
	CTBC Bank, Shanghai Branch	2019-2022		
(VI) Tong Da Gas Industries (Yangzhou) Ltd				
Sales Contract	Air Liquide Shanghai	2015-2030	Liquid gas purchase & sales agreement	N/A
	Far Eastern Union Petrochemical (Yangzhou) Ltd	2018-2019	Gas purchase & sales agreement	

VI. Financial Information

1. Condensed balance sheet, income statement, and external auditor's opinion for the last five years

Condensed balance sheet and comprehensive income statement – IFRSs

1.1 Condensed balance sheet – IFRSs

1.1.1 Consolidated balance sheet

Currency unit: NTD thousand

Item \ Year		Financial information for the last five years (Note 1)					Financial information available up to March 31, 2019 (Note 2)
		2014	2015	2016	2017	2018	
Current assets		7,373,058	8,630,400	6,701,159	8,125,752	6,808,358	7,378,964
Property, plant and equipment		15,784,100	17,759,516	17,420,210	16,732,309	15,998,671	16,009,295
Intangible assets		20,007	28,027	27,964	24,642	22,811	21,647
Other assets		12,295,285	11,736,498	10,929,551	11,069,155	13,568,380	13,898,183
Total assets		35,472,450	38,154,441	35,078,884	35,951,858	36,398,220	37,308,089
Current liabilities	Before distribution	6,201,539	8,100,791	9,024,797	9,604,371	9,680,967	9,985,721
	After distribution	7,087,242	8,543,643	9,201,938	11,154,351	Note 3	Note 3
Non-current liabilities		9,624,629	12,233,664	10,094,525	8,450,056	8,129,538	8,170,382
Total liabilities	Before distribution	15,826,168	20,334,455	19,119,322	18,054,427	17,810,505	18,156,103
	After distribution	16,711,871	20,777,307	19,296,463	19,604,407	Note 3	Note 3
Capital stock		8,857,031	8,857,031	8,857,031	8,857,031	8,857,031	8,857,031
Capital surplus	Before distribution	1,337,902	1,351,656	915,681	741,291	765,359	765,359
	After distribution	1,337,902	908,804	738,540	741,291	741,291	741,291
Retained earnings	Before distribution	5,547,811	4,499,473	3,888,027	5,621,845	6,308,071	6,498,971
	After distribution	4,662,108	4,499,473	3,888,027	4,071,865	Note 3	Note 3
Other equities		1,040,098	510,728	1,613	(223,270)	(775,481)	(513,241)
Treasury stock		(187,798)	(187,798)	(187,798)	(187,798)	(187,798)	(187,798)
Equity attributable to the parent company	Before distribution	16,595,044	15,031,090	13,474,554	14,809,099	14,967,182	15,420,322
	After distribution	15,709,341	14,588,238	13,297,413	13,259,119	Note 3	Note 3
Non-controlling interest		3,051,238	2,788,896	2,485,008	3,088,332	3,620,533	3,731,664
Total equities	Before distribution	19,646,282	17,819,986	15,959,562	17,897,431	18,587,715	19,151,986
	After distribution	18,760,579	17,377,134	15,782,421	16,347,451	Note 3	Note 3

Note 1: The 2014 ver. Taiwan-IFRSs applies to the financial statement of 2014-2018.
Note 2: The financial statement for Q1 of 2019 was reviewed by the external auditor.
Note 3: The motion for allocation of cash dividend 2018 had not yet been resolved by a shareholders' meeting.

1.1.2 Individual balance sheet

Currency unit: NTD thousand

Item		2014	2015	2016	2017	2018
Current assets		2,253,330	2,821,999	2,296,407	2,263,854	2,784,425
Property, plant and equipment		5,986,816	6,627,557	6,967,589	6,861,677	6,561,532
Intangible assets		9,896	7,192	9,002	8,148	8,362
Other assets		15,881,958	14,840,754	13,415,327	14,146,988	14,663,397
Total assets		24,132,000	24,297,502	22,688,325	23,280,667	24,017,716
Current liabilities	Before distribution	3,055,248	1,387,944	1,453,345	1,477,356	1,454,395
	After distribution	3,940,951	1,830,796	1,630,486	3,027,336	(Note)
Non-current liabilities		4,481,708	7,878,468	7,760,426	6,994,212	7,596,139
Total liabilities	Before distribution	7,536,956	9,266,412	9,213,771	8,471,568	9,050,534
	After distribution	8,422,659	9,709,264	9,390,912	10,021,548	(Note)
Capital stock		8,857,031	8,857,031	8,857,031	8,857,031	8,857,031
Capital surplus	Before distribution	1,337,902	1,351,656	915,681	741,291	765,359
	After distribution	1,337,902	908,804	738,540	741,291	(Note)
Retained earnings	Before distribution	5,547,811	4,499,473	3,888,027	5,621,845	6,308,071
	After distribution	4,662,108	4,499,473	3,888,027	4,071,865	(Note)
Other equities		1,040,098	510,728	1,613	(223,270)	(775,481)
Treasury stock		(187,798)	(187,798)	(187,798)	(187,798)	(187,798)
Total equities	Before distribution	16,595,044	15,031,090	13,474,554	14,809,099	14,967,182
	After distribution	15,709,341	14,588,238	13,297,413	13,259,119	(Note)

Note: The motion for allocation of cash dividend 2018 had not yet been resolved by a shareholders' meeting.

1.2 Condensed comprehensive income statement – IFRSs

1.2.1 Consolidated comprehensive income statement

Currency unit: NT$ thousand, other than EPS, which shall be stated at NT$

Item \ Year	Financial information for the last five years (Note 1)					Financial information available up to March 31, 2019 (Note 2)
	2014	2015	2016	2017	2018	
Operating revenue	14,126,334	13,924,475	19,531,054	28,919,810	32,115,817	6,599,968
Gross profit	1,165,385	1,360,697	955,046	4,444,555	4,298,803	271,285
Operating income	386,474	534,656	139,370	3,501,721	3,298,641	41,655
Non-operating revenue and expense	(342,658)	(880,102)	(869,570)	(444,429)	(118,626)	245,564
Profit before income tax	43,816	(345,446)	(730,200)	3,057,292	3,180,015	287,219
Net income	64,006	(314,617)	(645,690)	2,396,176	2,387,058	219,640
Other comprehensive income (net after tax)	521,401	(639,730)	(778,759)	(283,917)	29,884	344,631
Total comprehensive income	585,407	(954,347)	(1,424,449)	2,112,259	2,416,942	564,271
Net income attributable to parent company	116,525	(119,952)	(562,188)	1,749,409	1,750,724	190,900
Net income attributable to non-controlling interest	(52,519)	(194,665)	(83,502)	646,767	636,334	28,740
Total comprehensive income attributable to parent company	482,489	(692,005)	(1,120,561)	1,508,935	1,848,130	453,140
Total comprehensive income attributable to non-controlling	102,918	(262,342)	(303,888)	603,324	568,812	111,131
EPS (Note 3)	0.13	(0.14)	(0.64)	2.01	2.01	0.22

Note 1: The 2014 ver. Taiwan-IFRSs applies to the financial statement of 2014-2018.

Note 2: The financial statement for Q1 of 2019 was reviewed by the external auditor.

Note 3: The EPS is calculated after the retroactive adjustment on earnings and recapitalization of surplus.

1.2.2 Individual comprehensive income statement

Currency unit: NT$ thousand, other than EPS, which shall be stated at NT$

Item \ Year	Financial information for the last five years				
	2014	2015	2016	2017	2018
Operating revenue	12,420,607	11,762,073	10,985,765	12,755,671	14,619,729
Gross profit	1,307,437	1,485,123	740,099	1,904,856	2,051,886
Operating income	718,222	891,561	176,063	1,280,192	1,330,899
Non-operating revenue and expense	(622,280)	(1,053,321)	(825,666)	773,388	752,690
Profit before income tax	95,942	(161,760)	(649,603)	2,053,580	2,083,589
Net income	116,525	(119,952)	(562,188)	1,749,409	1,750,724
Other comprehensive income (net after tax)	365,964	(572,053)	(558,373)	(240,474)	97,406
Total comprehensive income	482,489	(692,005)	(1,120,561)	1,508,935	1,848,130
EPS (Note 1)	0.13	(0.14)	(0.64)	2.01	2.01

Note 1: The EPS is calculated after the retroactive adjustment on earnings and recapitalization of surplus.

1.3 CPA Name and audit opinion

Year	CPA Name	Audit opinion
2014	Hsin-Wei Tai & C. P. Shih	Unqualified opinion
2015	Yu-Wei Fan & C. P. Shih	Unqualified opinion
2016	Yu-Wei Fan & C. P. Shih	Unqualified opinion
2017	Hsin-Wei Tai & Yu-Wei Fan	Unqualified opinion
2018	Hsin-Wei Tai & Yu-Wei Fan	Unqualified opinion

2. Financial analysis for the last five years

Financial analysis – IFRSs

2.1 Consolidated financial analysis

Item			Financial analysis for the last five years (2014)	(2015)	(2016)	(2017)	(2018)	March 31, 2019 (Note 1)
Financial structure (%)	Liabilities to assets		44.62	53.30	54.50	50.22	48.93	48.67
	Long-term fund for property, plant and equipment		185.45	169.23	149.56	157.46	167.00	170.67
Liquidity analysis (%)	Current ratio		118.89	106.54	74.25	84.60	70.33	73.90
	Quick ratio		78.59	54.07	35.66	44.41	42.02	48.11
	Interest coverage ratio		142.11	(77.58)	(118.29)	980.82	961.45	464.54
Operation performance analysis	Receivables turnover (times)		15.46	12.28	13.24	15.39	15.40	12.98
	Average collection days		23.60	29.72	27.56	23.71	23.70	28.12
	Inventory turnover (times)		13.93	7.63	9.32	12.07	14.34	15.89
	Payables turnover (times)		7.72	10.53	12.53	12.93	10.42	9.72
	Average inventory turnover days		26.20	47.84	39.16	30.24	25.45	22.97
	Property, plant and equipment turnover (times)		1.25	0.83	1.11	1.69	1.96	1.65
	Total assets turnover (times)		0.48	0.38	0.53	0.81	0.89	0.72
Profitability	ROA (%)		0.41	(0.66)	(1.14)	7.55	7.41	0.77
	ROE (%)		0.35	(1.68)	(3.82)	14.15	13.09	1.16
	Ratio to paid-in capital (%)	Operating profit	4.36	6.04	1.57	39.54	37.24	0.47
		Net profit before tax	0.49	(3.90)	(8.24)	34.52	35.90	3.24
	Net income margin (%)		0.45	(2.26)	(3.31)	8.29	7.43	3.33
	EPS (NT$) (Note 2)		0.13	(0.14)	(0.64)	2.01	2.01	0.22
Cash flow (%)	Cash flow ratio (%)		(7.05)	2.89	11.54	44.36	43.59	(5.46)
	Cash flow adequacy ratio (%)		46.62	35.15	25.95	42.36	48.48	81.31
	Cash flow reinvestment ratio (%)		(3.94)	(1.65)	1.71	11.12	7.07	(1.31)
Leverage	Operating leverage		6.15	4.93	14.54	0.91	1.48	7.39
	Financial leverage		1.37	1.19	(1.03)	1.11	1.13	(1.12)

The cause of changes of more than 20% in financial rates over the last two years:
1. The decrease in cash flow reinvestment ratio resulted from the increase in the distribution of stock dividend in 2018.
2. The increase in operating leverage resulted from the decrease of the operating profit ratio.

Note 1: The financial statement for Q1 of 2019 was reviewed by the external auditor.

Note 2: The EPS is calculated after the retroactive adjustment on earnings and recapitalization of surplus, based on the number of shares circulated.

2.2 Individual financial analysis

Item			2014	2015	2016	2017	2018
Year			Financial analysis for the last five years				
Financial structure (%)	Liabilities to assets		31.23	38.14	40.61	36.39	37.68
	Long-term fund for property, plant and equipment		352.05	345.67	304.77	317.75	343.87
Liquidity analysis (%)	Current ratio		73.75	203.32	158.01	153.24	191.45
	Quick ratio		35.33	150.03	106.04	82.29	118.43
	Interest coverage ratio		333.42	(162.93)	(721.93)	3,236.59	3,644.00
Operation performance analysis	Receivables turnover (times)		13.87	15.33	12.71	11.98	14.22
	Average collection days		26.32	23.80	28.71	30.46	25.66
	Inventory turnover (times)		15.54	16.91	22.35	16.54	15.24
	Payables turnover (times)		9.25	16.24	15.18	14.14	16.97
	Average inventory turnover days		23.49	21.58	16.33	22.07	23.95
	Property, plant and equipment turnover (times)		2.30	1.86	1.62	1.84	2.18
	Total assets turnover (times)		0.55	0.49	0.47	0.55	0.62
Profitability	ROA (%)		0.64	(0.32)	(2.14)	7.84	7.60
	ROE (%)		0.69	(0.76)	(3.94)	12.37	11.76
	Ratio to paid-in capital (%)	Operating profit	8.11	10.07	1.99	14.45	15.03
		Net profit before tax	1.08	(1.83)	(7.33)	23.19	23.52
	Net income margin (%)		0.94	(1.02)	(5.12)	13.71	11.98
	EPS (NT$) (Note)		0.13	(0.14)	(0.64)	2.01	2.01
Cash flow (%)	Cash flow ratio (%)		11.43	118.47	36.09	96.88	124.35
	Cash flow adequacy ratio (%)		85.03	83.41	70.04	70.61	62.72
	Cash flow reinvestment ratio (%)		(2.42)	2.40	0.27	4.00	0.79
Leverage	Operating leverage		3.27	2.89	8.88	2.05	2.27
	Financial leverage		1.06	1.06	1.71	1.05	1.05

The cause of changes of more than 20% in financial rates over the last two years:
1. The increase in quick ratio resulted from the increase in cash and cash equivalents in 2018.
2. The increase in payable turnover resulted from an increase in the product selling cost in 2018.
3. The increase in cash flow adequacy ratio resulted from an increase in net cash inflow from 2018 operating activities.
4. The decrease in cash flow reinvestment ratio resulted from the increase in the distribution of stock dividend in 2018.

Note: The EPS is calculated after the retroactive adjustment on earnings and recapitalization of surplus.

The financial analysis formula:

1. Financial structure
   (1) Liabilities to assets = Total liabilities / total assets
   (2) Long-term fund for property, plant and equipment = (total equity + non-current liabilities) / net property, plant and equipment
2. Liquidity analysis
   (1) Current ratio = current assets / current liabilities
   (2) Quick ratio = (current assets – inventory – prepaid expense) / current liabilities
   (3) Interest coverage ratio = earnings before interest and tax / interest expenses
3. Operation performance analysis
   (1) Receivables (including accounts receivable and notes receivable resulting from operation) turnover = net sales / average accounts receivable (including accounts receivable and notes receivable resulting from operation)
   (2) Average collection days = 365 / accounts receivable turnover
   (3) Inventory turnover = cost of sales / average inventory
   (4) Payables (including accounts payable and notes payable resulting from operation) turnover = cost of sales / average accounts payable (including accounts payable and notes payable resulting from operation)
   (5) Average inventory turnover days = 365 / inventory turnover
   (6) Property, plant and equipment turnover = net sales / average net property, plant and equipment
   (7) Total assets turnover rate = net sales / average total assets
4. Profitability
   (1) ROA = [net income + interest expense × (1 – tax rate)] / average total assets.
   (2) ROE = net income / average total equity
   (3) Net income margin = net income / net sales
   (4) Earnings Per Share = (income attributable to parent company – preferred stock dividend) / weighed average number of shares outstanding
5. Cash flow
   (1) Cash flow ratio = Net cash flow from operating activities / current liabilities
   (2) Cash flow adequacy ratio = Net cash flow from operating activities over the last five years / (capital expenditures + increase in inventory + cash dividends) over the last five years
   (3) Cash flow reinvestment ratio = (Net cash flow from operating activities-cash dividends) / (gross property, plant and equipment + long-term investment + other non-current assets + working capital)
6. Leverage:
   (1) Operating leverage = (Net sales-variable operating costs and expenses) / operating income
   (2) Financial leverage = Operating income / (operating income-interest expenses)

3. The Audit Committee's Review Report

To the 2019 General Shareholders' Meeting of Oriental Union Chemical Union Corporation,

In accordance with Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act, we have examined the Business Report, Financial Statements, and the Resolution for Allocation of Dividend submitted by Board of Directors for the year ending 2018, which have been audited by independent auditors, Mr. Hsin-Wei Tai and Mr. Yu-Wei Fan of Deloitte & Touche, and found them in order.

The Convener of the Audit Committee: Walt Cheng

March 19, 2019

4. In the case of insolvency of the Company and its affiliates: N/A

5. Consolidated financial statements and external auditor's audit report for the recent year

(For the complete financial statements, please see the attachment to the annual report or view the MOPS on http://mops.twse.com.tw/)

2018 Independent Auditors' Report

(English Translation of a Report Originally Issued in Chinese)

The Board of Directors and Stockholders
Oriental Union Chemical Corporation

Opinion

We have audited the accompanying consolidated financial statements of Oriental Union Chemical Corporation and its subsidiaries (the "Group"), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "consolidated financial statements").

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, 2018 and 2017, 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 International Financial Reporting Standards ("IFRS"), International Accounting Standards ("IAS"), IFRIC Interpretations ("IFRIC"), and SIC Interpretations ("SIC") endorsed and issued into effect by the Financial Supervisory Commission ("FSC") of the Republic of China ("ROC").

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the ROC. 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 Norm of Professional Ethics for Certified Public Accountant of the ROC, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for 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, 2018. 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.

The descriptions of the key audit matters of the consolidated financial statements for the year ended December 31, 2018 are as follow:

<u>The Impairment Loss of Property, Plant and Equipment</u>

The consolidated balances of property, plant and equipment amounted to $15,063,737 thousand as of December 31, 2018. On each balance sheet date, the Group reviews its tangible assets for indications of impairment. If any indication thereof exists, the Group then estimates the recoverable amount of the assets. If it is not possible to determine the recoverable amount (fair value less cost to sell and value in use) for the individual asset, then the Group will determine the recoverable amount for the asset's cash-generating unit. Because the aforementioned tangible assets represent 41% of total consolidated assets and the calculation for recoverable amount involves several assumptions and estimations, which directly impact the amount recognized as impairment losses, we deem the review of impairment of assets a key audit matter.

Corresponding audit procedures:

1. We obtained an understanding of management's estimation of asset impairment and of the design and execution for relevant controls.
2. We evaluated the rationality of management's identification of impairment indicators and the appropriateness of the assumptions. Given that there are impairment indications, we performed:
   a. Obtained the asset impairment valuation form produced by the management for each cash-generating unit.
   b. Consulted Deloitte firm internal experts regarding the appropriateness of the assumptions, including the classification of cash-generating units, forecast of cash flows, and discount rate.

Other Matter

We have also audited the parent company only financial statements of Oriental Union Chemical Corporation as of and for the years ended December 31, 2018 and 2017 on which we have issued an unmodified report.

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 IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the FSC of the ROC, 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 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 ROC 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 the auditing standards generally accepted in the ROC, 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 and appropriate audit evidence regarding the financial information of 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 for the year ended December 31, 2018 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 Hsin-Wei Tai and Yu-Wei Fan.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 19, 2019

Notice to Readers

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

For the convenience of readers, the independent auditors' report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the ROC. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and consolidated financial statements shall prevail.

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Oriental Union Chemical Corporation (the "Corporation") was incorporated in December 1975. It manufactures and markets ethylene glycols, ethylene oxide, gas oxygen, gas nitrogen, liquid nitrogen, liquid argon, monoethanolamine, ethylene carbonate, polyethylene glycol, polyoxyethylene lauryl ether and methoxy polyethylene glycols. Its stocks were listed on the Taiwan Stock Exchange ("TWSE") on October 21, 1987.

The consolidated financial statements of the Corporation and its subsidiaries, collectively the "Group", are presented in the Corporation's functional currency, New Taiwan dollars.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Corporation's board of directors on March 19, 2019.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the ROC Financial Supervisory Commission (FSC)

   Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Group's accounting policies:

   1) IFRS 9 "Financial Instruments" and related amendments

      IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 4 for information relating to the relevant accounting policies.

      Classification, measurement and impairment of financial assets

      On the basis of the facts and circumstances that existed as of January 1, 2018, the Group has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Group’s financial assets and financial liabilities as of January 1, 2018.

Financial Assets	Measurement Category: IAS 39	Measurement Category: IFRS 9	Carrying Amount: IAS 39	Carrying Amount: IFRS 9	Remark
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 1,946,019	$ 1,946,019	-
Equity securities	Held-for-trading	Mandatorily at FVTPL	32,240	32,240	-
	Available-for-sale	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	1,098,562	1,098,562	a)
	Financial assets measured at cost	FVTOCI - equity instruments	3,541,901	3,377,766	a)
Mutual funds	Available-for-sale	Mandatorily at FVTPL	68,711	68,711	b)
Time deposits with original maturities of more than 3 months	Loans and receivables	Amortized cost	75,976	75,976	c)
Notes receivable, trade receivables and other receivables	Loans and receivables	Amortized cost	2,218,333	2,218,333	d)

Financial Assets	IAS 39 Carrying Amount as of January 1, 2018	Reclassifi-cations	Remea-surements	IFRS 9 Carrying Amount as of January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Equity Effect on January 1, 2018	Remark
FVTPL	$ 32,240	$ -	$ -	$ 32,240	$ -	$ -	-
Add: Reclassification from available-for-sale (IAS 39) Required reclassification	-	68,711	-	68,711	(11,369)	11,369	b)
	32,240	68,711	-	100,951	(11,369)	11,369	
FVTOCI							
Equity instruments	-	-	-	-	-	-	-
Add: Reclassification from financial assets measured at cost (IAS 39)	-	3,541,901	(164,135)	3,377,766	485,537	(649,672)	a)
Add: Reclassification from available-for-sale (IAS 39)	-	1,098,562	-	1,098,562	-	-	a)
	-	4,640,463	(164,135)	4,476,328	485,537	(649,672)	
Amortized cost							
Add: Reclassification from debt investments with no active market (IAS 39)	-	75,976	-	75,976	-	-	c)
	-	75,976	-	75,976	-	-	
	$ 32,240	$ 4,785,150	$ (164,135)	$ 4,653,255	$ 474,168	$ (638,303)	

a) The Group elected to designate all its investments in equity securities previously classified as available-for-sale under IAS 39 as at FVTOCI under IFRS 9, because these investments are not held for trading. As a result, the related other equity - unrealized loss on available-for-sale financial assets of $10,952 thousand was reclassified to other equity - unrealized gain (loss) on financial assets at FVTOCI.

   Investments in unlisted shares previously measured at cost under IAS 39 have been designated as at FVTOCI under IFRS 9 and were remeasured at fair value. Consequently, a decrease of $164,135 thousand was recognized in both financial assets at FVTOCI and other equity - unrealized gain (loss) on financial assets at FVTOCI on January 1, 2018.

   The Group recognized under IAS 39 impairment loss on certain investments in equity securities previously measured at cost and the loss was accumulated in retained earnings. Since those investments were designated as at FVTOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $485,537 thousand in other equity - unrealized gain (loss) on financial assets at FVTOCI and an increase of $485,537 thousand in retained earnings on January 1, 2018.

b) Mutual funds previously classified as available-for-sale under IAS 39 were classified mandatorily as at FVTPL under IFRS 9, because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The retrospective adjustment resulted in an increase of $11,369 thousand in other equity - unrealized gain (loss) on available-for-sale financial assets and a decrease of $11,369 thousand in retained earnings on January 1, 2018.

c) Debt investments previously classified as debt investments with no active market and measured at amortized cost under IAS 39 were classified as at amortized cost with an assessment of expected credit losses under IFRS 9, because on January 1, 2018, the contractual cash flows were solely payments of principal and interest on the principal outstanding and these investments were held within a business model whose objective is to collect contractual cash flows.

d) Notes receivable, trade receivables and other receivables that were previously classified as loans and receivables under IAS 39 were classified as at amortized cost with an assessment of expected credit losses under IFRS 9.

2) IFRS 15 "Revenue from Contracts with Customers" and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers and supersedes IAS 18 "Revenue", IAS 11 "Construction Contracts" and a number of revenue-related interpretations. Refer to Note 4 for related accounting policies.

Under IFRS 15, the net effect of revenue recognized and consideration received and receivable is recognized as a contract asset or a contract liability. Prior to the application of IFRS 15, receivables and unearned revenue decreased when revenue was recognized for the relevant contract under IAS 18, and reclassified amounts of other current liabilities $252,563 thousand to contract liability.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed by the FSC for application starting from 2019

New, Amended or Revised Standards and Interpretations (the "New IFRSs")	**Effective Date Announced by IASB (Note 1)**
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019 (Note 2)
IFRS 16 "Leases"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019 (Note 3)
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Group shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

1) IFRS 16 “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Definition of a lease

Upon initial application of IFRS 16, the Group will elect to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

The Group as lessee

Upon initial application of IFRS 16, the Group will recognize right-of-use assets, and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts, are recognized as expenses on a straight-line basis. Prepaid lease payments for land use rights of land located in the People's Republic of China are recognized as prepayments for leases. Cash flows for operating leases are classified within operating activities and investing activities on the consolidated statements of cash flows.

The Group anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee’s incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities as if IFRS 16 had been applied since the commencement date. The Group will apply IAS 36 to all right-of-use assets.

The Group expects to apply the following practical expedients:

a) The Group will apply a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

b) The Group will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

c) The Group will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.

d) The Group will use hindsight, such as in determining lease terms, to measure lease liabilities.

The Group as lessor

The Group will not make any adjustments for leases in which it is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

Anticipated impact on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application	Adjusted Carrying Amount as of January 1, 2019
Prepayments for leases - current	$ 12,587	$ (12,587)	$ -
Prepayments for leases - non-current	393,617	(393,617)	-
Right-of-use assets	-	438,809	438,809
Total effect on assets	$ 406,204	$ 32,605	$ 438,809
Lease liabilities - current	$ -	$ 9,827	$ 9,827
Lease liabilities - non-current	-	22,778	22,778
Total effect on liabilities	$ -	$ 32,605	$ 32,605
Total effect on equity		$ -	

Except for the above impacts, as of the date the consolidated financial statements were authorized for issue, the Group continues assessed other possible impacts that the application of the aforementioned amendments and the related amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers would not have impacts on the Group's financial position and financial performance.

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Group shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Group shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Group is continuously assessing the possible impact that the application of above standards and interpretations will have on the Group's financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and IFRSs as endorsed and issued into effect by the FSC.

b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments measured at fair value, and net defined benefit liabilities measured at the present value of the defined benefit obligation less the fair value of plan assets.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

3) Level 3 inputs are unobservable inputs for an asset or liability.

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the consolidated financial statements are authorized for issue; and

3) Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Corporation and the entities controlled by the Corporation (i.e. its subsidiaries).

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Corporation and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

See Note 15, Tables 8 and 9 for detailed information on subsidiaries (including percentages of ownership and main businesses).

e. Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (i.e. foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income; in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

For the purpose of presenting consolidated financial statements, the functional currencies of the Corporation and the group entities (including subsidiaries and associates in other countries that use currencies which are different from the currency of the Corporation) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Corporation and non-controlling interests as appropriate).

f. Inventories

Inventories consist of raw materials, work in progress and finished goods and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. The net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at the weighted-average cost on the balance sheet date.

g. Investments in associates

An associate is an entity over which the Group has significant influence and which is not a subsidiary. The Group uses the equity method to account for its investments in associates.

Under the equity method, investments in an associate is initially recognized at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate. The Group also recognizes the changes in the Group's share of the equity of associates attributable to the Group.

When the Group's share of losses of an associate equals or exceeds its interest in that associate, the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment's fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required had that associates directly disposed of the related assets or liabilities.

When a group entity transacts with its associate, profits and losses resulting from the transactions with the associate is recognized in the Group' consolidated financial statements only to the extent that interests in the associate is not related to the Group.

h. Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are measured at cost less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation of property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in the estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

i. Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are initially measured at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss.

j. Intangible assets

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in the estimates accounted for on a prospective basis.

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

k. Impairment of tangible and intangible assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets, to determine whether there is any indication that those assets have suffered any impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

l. Financial instruments

Financial assets and financial liabilities are recognized when the Group becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities (other than financial assets and financial liabilities at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss.

1) Financial assets

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

a) Measurement categories

<u>2018</u>

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost and investments in equity instruments at FVTOCI.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 31.

ii. Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, trade receivables, and other receivables, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii) Financial assets that are not credit-impaired on purchase or origination but have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

Cash equivalents include time deposits and repurchase agreements collateralized by bonds with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2017

Financial assets are classified into the following categories: Financial assets at FVTPL, available-for-sale financial assets and loans and receivables.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such financial assets are held for trading.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset.

ii. Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amounts of available-for-sale monetary financial assets (relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments) are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when such investments are disposed of or are determined to be impaired.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established.

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity investments are measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value of such financial assets is recognized in other comprehensive income. Any impairment losses are recognized in profit and loss.

iii. Loans and receivables

Loans and receivables (including trade receivables, notes receivables, cash and cash equivalents, other receivables and debt investments with no active market) are measured using the effective interest method at amortized cost less any impairment, except for short-term receivables when the effect of discounting is immaterial.

Cash equivalents include time deposits and repurchase agreements collateralized by bonds with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

b) Impairment of financial assets

2018

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables).

The Group always recognizes lifetime expected credit losses (i.e. ECLs) for trade receivables. For all other financial instruments, the Group recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

2017

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence, as a result of one or more events that occurred after the initial recognition of such financial assets, that the estimated future cash flows of the investment have been affected.

Financial assets at amortized cost, such as notes receivable and trade receivables, are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Group’s past experience with collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with defaults on receivables.

For a financial asset at amortized cost, the amount of the impairment loss recognized is the difference between such an asset’s carrying amount and the present value of its estimated future cash flows, discounted at the financial asset’s original effective interest rate.

For a financial asset at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment (at the date on which the impairment is reversed) does not exceed what the amortized cost would have been had the impairment not been recognized.

For available-for-sale equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss is not reversed through profit or loss. Any increase in fair value subsequent to impairment is recognized in other comprehensive income. In respect of available-for-sale debt securities, impairment loss is subsequently reversed through profit or loss if an increase in the fair value of such an investment can be objectively related to an event occurring after the recognition of the impairment loss.

For a financial asset measured at cost, the amount of the impairment loss is measured as the difference between such an asset's carrying amount and the present value of its estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of a financial asset is reduced by the impairment loss directly for all financial assets, with the exception of notes receivables and trade receivables, where the carrying amount is reduced through the use of an allowance account. When notes receivable and trade receivables are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible notes receivable and trade receivables that are written off against the allowance account.

c) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of a financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

m. Revenue recognition

2018

The Group identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

For contracts where the period between the date on which the Group transfers a promised good or service to a customer and the date on which the customer pays for that good or service is one year or less, the Group does not adjust the promised amount of consideration for the effects of a significant financing component.

When another party is involved in providing goods or services to a customer, the Group recognizes revenue in the gross amount if it controls each specified good or service before that good or service is transferred to the customer (the Group is a principal); otherwise, the Group recognizes revenue in the net amount (the Group is an agent).

A specified good or service is a distinct good or service, the Group determines whether it is a principal or an agent for each specified good or service.

The Group is a principal if it meets any one of the following conditions:

1) The Group obtains control of a good or service from the other party before the Group transfers the good or service to a customer.

2) The Group has a right to a service to be performed by the other party, which gives the entity the ability to direct that party to provide the service to the customer on the entity's behalf.

3) The Group obtains control of a good or service from the other party that it then combines with other goods or services in providing the specified good or service to the customer.

Indicators that are used to determine whether the Group controls the specified good or service before it is transferred to the customer include, but are not limited to, the following:

1) The Group is primarily responsible for fulfilling the promise to provide the specified good or service.

2) The Group has inventory risk before and after the specified good or service has been transferred to a customer or after transfer of control to the customer.

3) The Group has discretion in establishing the price for the specified good or service.

2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Sales returns are recognized at the time of sale based on the seller's reliable estimate of future returns and based on past experience and other relevant factors.

1) Sale of goods

Revenue from the sale of goods is recognized when all the following conditions are satisfied:

a) The Group has transferred to the buyer the significant risks and rewards of ownership of the goods;

b) The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

c) The amount of revenue can be measured reliably;

d) It is probable that the economic benefits associated with the transaction will flow to the Group; and

e) The costs incurred or to be incurred in respect of the transaction can be measured reliably.

2) Dividend and interest income

Dividend income from investments is recognized when the stockholder’s right to receive payment has been established and provided that it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis by reference to the principal outstanding and at the applicable effective interest rate.

n. Leasing

Rental income or expense from operating leases is recognized on a straight-line basis over the term of the relevant lease.

o. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than that stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

p. Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

q. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related services.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and net interest on the net defined benefit liabilities (assets)) is recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

r. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

According to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liabilities are settled or the assets are realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity; in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Impairment Assessment of Property, Plant and Equipment

In the process of assessing impairment, the Group relies on subjective judgment to determine whether the specific group of assets have indications of impairment, according to the usage of the assets and the business' characteristics. Alteration of estimates from any change in economic conditions or business strategy may lead to significant future impairment loss.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2018	**2017**
Cash on hand	$ 110	$ 116
Checking accounts and demand deposits	1,755,024	1,885,504
Cash equivalents		
Time deposits with original maturities of less than 3 months	13,426	46,399
Repurchase agreements collateralized by bonds	141,940	14,000
	$ 1,910,500	$ 1,946,019

The market rate intervals of cash in the bank at the end of the reporting period were as follows:

	December 31	
	2018	2017
Bank balance	0.01%-1.8%	0.01%-1.8%
Repurchase agreements collateralized by bonds	0.33%-0.45%	0.28%

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2018	2017
Financial assets held for trading		
Non-derivative financial assets		
Domestic listed shares	$ -	$ 32,240
Financial assets mandatorily classified as at FVTPL		
Domestic listed shares	$ 14,480	$ -
Domestic mutual funds	63,589	-
	$ 78,069	$ -

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - 2018

Investments in equity instruments at FVTOCI

	December 31, 2018
Non-current	
Domestic investments	
Listed shares	$ 1,272,070
Unlisted shares	4,035,348
	$ 5,307,418

These investments in equity instruments are not held for trading. Instead, they are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale under IAS 39. Refer to Notes 3, 4, 10 and 11 for information relating to their reclassification and comparative information for 2017.

9. FINANCIAL ASSETS AT AMORTIZED COST - 2018

	December 31, 2018
Non-current	
Domestic investments	
Pledge certificates of deposits	$ 76,968

In December 31, 2018, the pledge certificates of deposits with an annual interest rate of 0.6%-1.4%. the Corporation assesses there has not been a significant expected credit losses and an increase in credit risk since the original recognize. The deposits were classified as debt investments with no active market under IAS 39. Refer to Note 3, Note 4 and Note 12 for information relating to their reclassification and comparative information for 2017.

Refer to Note 33 for information relating to financial assets at amortized cost as security.

10. AVAILABLE-FOR-SALE FINANCIAL ASSETS - 2017

	December 31, 2017
Domestic investments	
Listed shares	$ 1,098,562
Mutual funds	68,711
	$ 1,167,273
Current	$ 68,711
Non-current	1,098,562
	$ 1,167,273

11. FINANCIAL ASSETS MEASURED AT COST - 2017

	December 31, 2017
Domestic unlisted common stock	$ 3,541,901
Classified according to financial asset measurement categories	
Available-for-sale financial assets	$ 3,541,901

Management believed that the above unlisted equity investments held by the Group, whose fair value cannot be reliably measured, because the range of reasonable fair value estimates was so significant. Therefore, they were measured at cost less impairment at the end of reporting period.

12. DEBT INVESTMENTS WITH NO ACTIVE MARKET - 2017

	December 31, 2017
Pledge certificates of deposits	$ 75,976

Refer to Note 33 for information relating to debt investments with no active market pledged as security.

13. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31	
	2018	2017
Notes receivable		
Notes receivable	$ 786,293	$ 849,590
Less: Allowance for impairment loss	(668)	(669)
	$ 785,625	$ 848,921
Trade receivables		
Trade receivables	$ 1,238,067	$ 1,309,017
Less: Allowance for impairment loss	(5,437)	(5,649)
	$ 1,232,630	$ 1,303,368
Other receivables		
Tax refund receivables	$ 32,055	$ 34,458
Interest receivables	948	1,374
Others	28,542	30,212
	$ 61,545	$ 66,044

In 2018

The Group applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all notes receivable and trade receivables. The expected credit losses on notes receivable and trade receivables are estimated using a past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of economic conditions at the reporting date.

The following table details the loss allowance of notes receivable and trade receivables.

December 31, 2018

	0 to 60 Days	61 to 90 Days	91 to 120 Days	121 to 150 Days	Total
Carrying amount	$ 2,002,626	$ 17,070	$ 3,704	$ 960	$ 2,024,360
Loss allowance (Lifetime ECL)	(668)	(773)	(3,704)	(960)	(6,105)
Amortized cost	$ 2,001,958	$ 16,297	$ -	$ -	$ 2,018,255

The above aging schedule was based on the number of days past due from the invoice date.

The movements of the loss allowance of notes receivable and trade receivables were as follows:

	2018
Balance at January 1, 2017 per IAS 39	$ 6,318
Adjustment on initial application of IFRS 9	-
Balance at January 1, 2017 per IFRS 9	6,318
Less: Net remeasurement of loss allowance	(213)
Balance at December 31, 2018	$ 6,105

In 2017

For some trade receivables balances that were past due at the end of the reporting period, the Group did not recognize an allowance for impairment loss because there was no significant change in credit quality and the amounts were still considered recoverable. The Group did not hold any collateral or other credit enhancements for these balances.

The aging of receivables was as follows:

	December 31, 2017
Up to 60 days	$ 1,287,084
61-90 days	14,803
91-120 days	6,856
121-150 days	274
	$ 1,309,017

The above aging schedule was based on the number of days past due from the invoice date.

The aging of receivables that were past due but not impaired was as follows:

	December 31, 2017
Up to 60 days	$ 21,659
61-90 days	274
	$ 21,933

The above aging schedule was based on the number of days past due from the invoice date.

The movements of allowance for doubtful notes receivable and trade receivables were as follows:

	Collectively Assessed for Impairment
Balance at January 1, 2017	$ 6,535
Add: Impairment losses reversed	(217)
Balance at December 31, 2017	$ 6,318

14. INVENTORIES

	December 31	
	2018	2017
Finished goods	$ 1,119,503	$ 1,507,872
Work in progress	27,027	19,639
Raw materials	483,573	722,345
	$ 1,630,103	$ 2,249,856

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2018 and 2017 was $27,817,014 thousand and $24,475,255 thousand, respectively. The cost of goods sold for the years ended December 31, 2018 and 2017 included inventory write-downs of $18,377 thousand and reversals of inventory write-downs of $6,480 thousand. The reversals of previous write-downs resulted from increased selling prices in certain markets.

15. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership December 31 2018	2017	Remark
The Corporation	Ton Fu Investment Corp. (“TFIC”)	Investment	100	100	-
	Pacific Petrochemical (Holding) Ltd. (“PPL”)	Investment	100	100	-
	OUCC (Bermuda) Holding Ltd. (“OUCC (Bermuda)”)	Investment	100	100	-
OUCC (Bermuda)	Oriental Petrochemical (Yangzhou) Corporation (“OPYC”)	Manufacturing and selling ethanolamine (EA) and alcohol ethoxylates (AEO)	100	100	-
PPL	Far Eastern Union Petrochemical (Yangzhou) Ltd. (“FUPY”)	Manufacturing and selling ethylene glycol, diethylene glycol, triethylene glycol and ethylene oxide.	50	50	Note
	Tong Da Gas Industries (Yangzhou) Limited (“TDIY”)	Manufacturing and selling gas oxygen, gas nitrogen, liquid oxygen, liquid nitrogen and liquid argon and the warehousing management of ethylene.	50	50	Note

Note: Subsidiary with material non-controlling interests.

b. Subsidiaries excluded from the consolidated financial statements: None.

c. Details of subsidiaries that have material non-controlling interests

Name of Subsidiary	Principal Place of Business	Proportion of Ownership and Voting Rights Held by Non-controlling Interests December 31 2018	2017
FUPY	Yang Zhou, China	50%	50%
TDIY	Yang Zhou, China	50%	50%

Name of Subsidiary	Profit (Loss) Allocated to Non-controlling Interests For the Year Ended December 31 2018	2017	Accumulated Non-controlling Interests December 31 2018	2017
FUPY	$ 531,519	$ 523,291	$ 2,468,119	$ 2,007,256
TDIY	104,815	123,476	1,152,414	1,081,076
	$ 636,334	$ 646,767	$ 3,620,533	$ 3,088,332

The summarized financial information below represents amounts before intragroup eliminations.

FUPY

	December 31 2018	2017
Current assets	$ 3,511,520	$ 4,979,174
Non-current assets	8,774,631	7,023,638
Current liabilities	(7,317,836)	(7,285,849)
Non-current liabilities	(32,078)	(702,451)
Equity	$ 4,936,237	$ 4,014,512
Equity attributable to:		
Owners of the Corporation	$ 2,468,118	$ 2,007,256
Non-controlling interests of FUPY	2,468,119	2,007,256
	$ 4,936,237	$ 4,014,512

	For the Year Ended December 31 2018	2017
Revenue	$ 16,591,829	$ 15,039,482
Net profit and comprehensive income for the year	$ 1,063,038	$ 1,046,582

(Continued)

	For the Year Ended December 31	
	2018	2017
Net profit attributable to:		
Owners of the Corporation	$ 531,519	$ 523,291
Realized gain from transactions between subsidiaries	326	326
Carrying amount of FUPY investments	$ 531,845	$ 523,617
Non-controlling interests of FUPY	$ 531,519	$ 523,291
Net cash inflow (outflow) from:		
Operating activities	$ 634,290	$ 2,786,528
Investing activities	(254,153)	(207,523)
Financing activities	(985,346)	(1,699,983)
Net cash (outflow) inflow	$ (605,209)	$ 879,022

(Concluded)

TDIY

	December 31	
	2018	2017
Current assets	$ 519,709	$ 412,868
Non-current assets	1,934,589	2,064,581
Current liabilities	(147,263)	(313,050)
Non-current liabilities	(2,207)	(2,247)
Equity	$ 2,304,828	$ 2,162,152
Equity attributable to:		
Owners of the Corporation	$ 1,152,414	$ 1,081,076
Non-controlling interests of TDIY	1,152,414	1,081,076
	$ 2,304,828	$ 2,162,152

	For the Year Ended December 31	
	2018	2017
Revenue	$ 1,014,885	$ 1,038,185
Net profit and comprehensive income for the year	$ 209,630	$ 246,952
Net profit attributable to:		
Owners of the Corporation	$ 104,815	$ 123,476
Non-controlling interests of TDIY	104,815	123,476
	$ 209,630	$ 246,952
Net cash inflow (outflow) from:		
Operating activities	$ 298,806	$ 385,073
Investing activities	(8,225)	(19,293)
Financing activities	(208,492)	(406,147)
Net cash inflow (outflow)	$ 82,089	$ (40,367)

16. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Investments in Associates

	December 31	
	2018	**2017**
Material associates		
Oriental Petrochemical (Shanghai) Corporation ("OPSC")	$ 2,039,984	$ 1,811,865
Associates that are not individually material		
Hwa Xu Heat Supply Co. ("HXYZ")	148,895	258,751
Oriental Resource Development Ltd. ("ORD")	-	151,781
Kuokuang Petrochemical Technology Corporation, Ltd. ("KPTC")	-	9,373
	$ 2,188,879	$ 2,231,770

In March 2018, for the need of future operational strategy, the Group sold all of its interest in ORD for proceeds of $170,747 thousand and resulted in the recognition of a gain in profit of $18,966 thousand.

Liquidation processes of KPTC completed in April 2018 and the Group received proceeds from the capital reduction of $9,510 thousand, which resulted in the recognition of a gain in profit of $137 thousand.

a. Material associates

Name of Associate	Nature of Activities	Principal Place of Business	Proportion of Ownership and Voting Rights December 31 2018	2017
OPSC	Manufacture and sale of purified terephthalic acid	Shanghai, China	39%	39%

The share of profit or loss and other comprehensive income recognized from the investment accounted for using the equity method were calculated based on the associates' financial statements which have been audited for the same years.

The summarized financial information below represents amounts shown in the associates' financial statements prepared in accordance with IFRSs adjusted by the Group for equity accounting purposes.

OPSC

	December 31	
	2018	**2017**
Current assets	$ 3,909,031	$ 4,772,635
Non-current assets	6,372,907	6,424,125
Current liabilities	(4,571,543)	(6,076,622)
Equity	$ 5,710,395	$ 5,120,138
Proportion of the Group's ownership	39%	39%

(Continued)

	December 31	
	2018	2017
Equity attributable to the Group	$ 2,206,913	$ 1,978,794
Negative goodwill	(166,929)	(166,929)
Carrying amount	$ 2,039,984	$ 1,811,865

(Concluded)

	For the Year Ended December 31	
	2018	2017
Operating revenue	$ 19,414,759	$ 13,133,263
Total comprehensive income (loss) for the year	$ 692,105	$ (828,760)

b. Aggregate information of associates that are not individually material

	For the Year Ended December 31	
	2018	2017
The Group's share of:		
Net loss	$ (107,348)	$ (77,322)
Other comprehensive loss	-	(57)
Total comprehensive loss for the year	$ (107,348)	$ (77,379)

The investments accounted for using equity method and the share of profit or loss and other comprehensive income of those investments for the years ended December 31, 2018 and 2017 were based on the associates' financial statements which have been audited for the same years.

17. PROPERTY, PLANT AND EQUIPMENT AND CONSTRUCTION IN PROGRESS

	Land	Land Improvements	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Equipment to Be Inspected	Total
Cost							
Balance at January 1, 2017	$ 1,591,461	$ 320,689	$ 1,786,256	$ 24,183,760	$ 646,524	$ 1,219,534	$ 29,748,224
Additions	-	-	471	7,708	1,477	576,139	585,795
Disposals	-	-	-	(15,155)	(6,277)	-	(21,432)
Effect of foreign currency exchange differences	-	-	(23,689)	(189,618)	(1,701)	(12,986)	(227,994)
Reclassification	-	-	43,090	577,981	54,149	(702,009)	(26,789)
Balance at December 31, 2017	$ 1,591,461	$ 320,689	$ 1,806,128	$ 24,564,676	$ 694,172	$ 1,080,678	$ 30,057,804
Accumulated depreciation							
Balance at January 1, 2017	$ -	$ 304,693	$ 462,780	$ 11,031,920	$ 528,621	$ -	$ 12,328,014
Disposals	-	-	-	(5,355)	(6,005)	-	(11,360)
Depreciation expenses	-	3,662	59,758	920,618	36,366	-	1,020,404
Effect of foreign currency exchange differences	-	-	(1,709)	(8,690)	(1,164)	-	(11,563)
Balance at December 31, 2017	$ -	$ 308,355	$ 520,829	$ 11,938,493	$ 557,818	$ -	$ 13,325,495
Carry amounts at December 31, 2017	$ 1,591,461	$ 12,334	$ 1,285,299	$ 12,626,183	$ 136,354	$ 1,080,678	$ 16,732,309

(Continued)

	Land	Land Improvements	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Equipment to Be Inspected	Total
Cost							
Balance at January 1, 2018	$ 1,591,461	$ 320,689	$ 1,806,128	$ 24,564,676	$ 694,172	$ 1,080,678	$ 30,057,804
Additions	-	-	1,078	18,052	8,420	482,491	510,041
Disposals	-	-	-	(159,437)	(10,042)	-	(169,479)
Effect of foreign currency exchange differences	-	-	(21,827)	(173,198)	(2,108)	(3,627)	(200,760)
Reclassification	-	-	51,645	497,113	72,309	(624,608)	(3,541)
Balance at December 31, 2018	$ 1,591,461	$ 320,689	$ 1,837,024	$ 24,747,206	$ 762,751	$ 934,934	$ 30,194,065
Accumulated depreciation							
Balance at January 1, 2018	$ -	$ 308,355	$ 520,829	$ 11,938,493	$ 557,818	$ -	$ 13,325,495
Disposals	-	-	-	(151,935)	(10,042)	-	(161,977)
Depreciation expenses	-	1,968	62,144	960,075	40,309	-	1,064,496
Effect of foreign currency exchange differences	-	-	(3,137)	(28,036)	(1,447)	-	(32,620)
Balance at December 31, 2018	$ -	$ 310,323	$ 579,836	$ 12,718,597	$ 586,638	$ -	$ 14,195,394
Carry amounts at December 31, 2018	$ 1,591,461	$ 10,366	$ 1,257,188	$ 12,028,609	$ 176,113	$ 934,934	$ 15,998,671

(Concluded)

The above items of property, plant and equipment were depreciated on a straight-line basis over the estimated useful lives as follows:

Land improvements	7-25 years
Buildings	6-60 years
Machinery and equipment	2-20 years
Other equipment	3-20 years

18. INVESTMENT PROPERTIES

Cost

Balance at December 31, 2018 and 2017	$ 2,023,323

	Accumulated Depreciation	Accumulated Impairment	Total
Accumulated depreciation and impairment			
Balance at January 1, 2017	$ 24,991	$ 6,513	$ 31,504
Depreciation expenses	83	-	83
Balance at December 31, 2017	$ 25,074	$ 6,513	$ 31,587
Balance at January 1, 2018	$ 25,074	$ 6,513	$ 31,587
Depreciation expenses	82	-	82
Balance at December 31, 2018	$ 25,156	$ 6,513	$ 31,669

The investment properties of land improvements held by the Group which are depreciated over their estimated useful lives of 16 years using the straight-line method.

The fair value of investment properties was $3,218,796 thousand and $3,134,582 thousand as of December 31, 2018 and 2017, respectively. The fair value was arrived at on the basis of a valuation carried out at that date by independent qualified professional values not connected to the Group.

19. PREPAYMENTS FOR LEASES

	December 31	
	2018	**2017**
Current assets	$ 12,587	$ 11,370
Non-current assets	393,617	410,543
	$ 406,204	$ 421,913

Prepayments for leases include land use rights located in People's Republic of China; the Group has obtained the land use right certificates.

20. OTHER ASSETS

	December 31	
	2018	**2017**
Other assets		
Silver and catalysts	$ 2,203,479	$ 918,205
Prepayments (Note 32)	659,133	-
Materials	464,901	434,591
Input tax	266,303	504,045
Others	238,509	99,001
	$ 3,832,325	$ 1,955,842
Current	$ 569,124	$ 655,082
Non-current	3,263,201	1,300,760
	$ 3,832,325	$ 1,955,842

Other assets include silver and catalysts used in the production, parts and components for the maintenance of equipment, input tax and prepayments.

21. BORROWINGS

a. Short-term borrowings

	December 31	
	2018	2017
Unsecured borrowings		
Line of credit borrowings	$ 5,305,133	$ 3,317,038
Loans from related parties (Note 32)	-	1,776,254
	$ 5,305,133	$ 5,093,292
Interest rate	1.00%-4.57%	1.01%-4.57%

b. Long-term borrowings

	December 31	
	2018	2017
Secured borrowings (Note 33)		
Long-term commercial paper payables	$ -	$ 129,872
Unsecured borrowings		
Bank loans	5,263,937	6,357,573
Long-term commercial paper payables	1,749,388	1,299,581
	7,013,325	7,657,154
Current portion of long-term borrowings	-	400,796
Long-term borrowing	$ 7,013,325	$ 7,386,230
Interest rate	0.57%-3.43%	0.44%-5.90%
Maturity date	November 2020	October 2019

22. OTHER PAYABLES

	December 31	
	2018	2017
Payables for purchase of equipment	$ 109,062	$ 125,867
Payables for salaries	108,483	118,381
Payables for employee’s compensation and remuneration of directors and supervisors	49,039	48,256
Freight payables	42,357	37,448
Payables for dividends	36,044	33,465
Interest payables	20,762	32,996
Payables for annual leave	18,798	23,759
Others	283,433	147,056
	$ 667,978	$ 567,228

23. OTHER LIABILITIES

	December 31	
	2018	2017
Contract liabilities	$ 148,159	$ -
Provisions for repairs and maintenance	44,624	51,046
Receipts in advance	-	252,563
Others	22,264	28,339
	$ 215,047	$ 331,948
Current	$ 170,423	$ 331,948
Non-current	44,624	-
	$ 215,047	$ 331,948

Contract liabilities were receipts in advance.

24. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Corporation of the Group adopted a pension plan under the Labor Pension Act (the “LPA”), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees’ individual pension accounts at 6% of monthly salaries and wages.

The employees of the Group’s subsidiary in China are members of a state-managed retirement benefit plan operated by the government of China. The subsidiary is required to contribute a specified percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Group with respect to the retirement benefit plan is to make the specified contributions.

The subsidiary, TFIC, has not set up a retirement benefit plan because it is served concurrently by the employees of the Corporation.

b. Defined benefit plan

The defined benefit plan adopted by the Corporation of the Group in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Corporation contribute amounts equal to 10% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee’s name. Before the end of each year, the Group assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Group is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (“the Bureau”); the Group has no right to influence the investment policy and strategy.

The amounts included in the consolidated balance sheets in respect of the Group's defined benefit plans were as follows:

	December 31	
	2018	2017
Present value of defined benefit obligation	$ 385,505	$ 406,208
Fair value of plan assets	(135,345)	(121,293)
Net defined benefit liabilities	$ 250,160	$ 284,915

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2017	$ 406,618	$ (122,614)	$ 284,004
Service cost			
Current service cost	11,699	-	11,699
Net interest expense (income)	5,083	(1,630)	3,453
Recognized in profit or loss	16,782	(1,630)	15,152
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	327	327
Actuarial loss - changes in demographic assumptions	9,093	-	9,093
Actuarial loss - experience adjustments	9,296	-	9,296
Recognized in other comprehensive income	18,389	327	18,716
Contributions from the employer	-	(32,957)	(32,957)
Benefits paid	(35,581)	35,581	-
Balance at December 31, 2017	$ 406,208	$ (121,293)	$ 284,915
Balance at January 1, 2018	$ 406,208	$ (121,293)	$ 284,915
Service cost			
Current service cost	11,859	-	11,859
Net interest expense (income)	5,078	(1,606)	3,472
Recognized in profit or loss	16,937	(1,606)	15,331
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(3,410)	(3,410)
Actuarial loss - changes in demographic assumptions	4,417	-	4,417
Actuarial loss - changes in financial assumptions	4,801	-	4,801
Actuarial gain - experience adjustments	(14,463)	-	(14,463)
Recognized in other comprehensive income	(5,245)	(3,410)	(8,655)
Contributions from the employer	-	(41,431)	(41,431)
Benefits paid	(32,395)	32,395	-
Balance at December 31, 2018	$ 385,505	$ (135,345)	$ 250,160

Through the defined benefit plans under the Labor Standards Law, the Corporation is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2018	**2017**
Discount rate(s)	1.13%	1.25%
Expected rate(s) of long - term salary increase	2.00%	2.00%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2018	**2017**
Discount rate(s)		
0.25% increase	$ (9,600)	$ (10,127)
0.25% decrease	$ 9,984	$ 10,542
Expected rate(s) of long - term salary increase		
0.25% increase	$ 9,721	$ 10,279
0.25% decrease	$ (9,397)	$ (9,926)

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 13,887	$ 14,363
The average duration of the defined benefit obligation	11.2 years	11.3 years

25. EQUITY

a. Common stock

	December 31	
	2018	2017
Number of stocks authorized (in thousands)	1,000,000	1,000,000
Stocks authorized	$ 10,000,000	$ 10,000,000
Number of stocks issued and fully paid (in thousands)	885,703	885,703
Stocks issued	$ 8,857,031	$ 8,857,031

A total of 10,000 thousand stocks of the Corporation's stock were authorized to be reserved for the issuance of employee stock options.

b. Capital surplus

	December 31	
	2018	2017
May be used to offset a deficit, distributed as cash dividends, or transferred to capital stock (Note)		
Issuance of common stock	$ 470,767	$ 470,767
Only be used to offset a deficit		
Treasury stock transactions	294,592	270,524
	$ 765,359	$ 741,291

Note: Such capital surplus may be used to offset a deficit; in addition, when the Corporation has no deficit, such capital surplus may be distributed as cash dividends or transferred to capital stock (limited to a certain percentage of the Corporation's capital surplus and once a year).

c. Retained earnings and dividends policy

Under the dividend policy as set forth in the Corporation's Articles of Incorporation ("Articles"), where the Corporation made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as a legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Corporation's board of directors as the basis for proposing a distribution plan, which should be resolved in the stockholders' meeting for the distribution of dividends and bonuses to stockholders. The settlement of the dividend and bonus distribution due to a capital increase in the fiscal year should be resolved in the stockholders' meeting. For the policies on the distribution of employees' compensation and remuneration of directors and supervisors before and after amendment, refer to Note 26 (c) "Employee benefits expense".

In accordance with the Articles, the dividend distribution takes into consideration the characteristics of industry that the Group operates in and the forthcoming capital requirement and tax policy that is influenced by the Group's products or services, and it should be settled for the purpose of maintaining stable dividends. The amount of cash dividends should not be less than 10% of the total dividends and bonuses to be distributed to stockholders in the fiscal year, unless the distribution is to fulfill capital requirements such as improving the financial structure effectively, coping with reinvestment, expanding capacity or other significant capital expenditure.

An appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Corporation’s paid-in capital. The legal reserve may be used to offset deficits. If the Corporation has no deficit and the legal reserve has exceeded 25% of the Corporation’s paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled “Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs”, shall be appropriated to or reversed from a special reserve by the Corporation. Any appropriated special reserve may be reversed to the extent that the net debit balance reverses, and thereafter it is distributed.

The appropriation of earnings for 2017 and the deficit compensations for 2016 were approved in the stockholders’ meetings on June 8, 2018 and June 8, 2017, respectively. Furthermore, above stockholders’ meetings resolved to offset deficit by legal reserve of $481,033 thousand and distribute cash dividends from its capital surplus of $177,141 thousand, respectively.

The appropriation of earnings for 2017 were approved in the stockholder’s meetings on June 8, 2018. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 173,382	$ -
Cash dividends	1,549,980	1.75

The appropriation of earnings for 2018 had been proposed by the Corporation’s board of directors on March 19, 2019. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 175,072	$ -
Cash dividends	1,549,980	1.75

The appropriation of earnings for 2018 is subject to the resolution of the stockholders’ meeting to be held on June 11, 2019.

d. Special reserves

On the first-time adoption of IFRSs, the Corporation appropriated to special reserve, the amounts that were the same as the unrealized revaluation increment, the fair value of investment properties at the date of transition as the deemed cost and the cumulative translation differences transferred to retained earnings, which were $985,545 thousand, $787,176 thousand and $138,408 thousand, respectively.

e. Treasury stock

The Corporation's stocks held by its subsidiaries at the end of the reporting periods were as follows:

Name of Subsidiary	Number of Stocks Held (In Thousands of Stocks)	Carrying Amount	Market Price
December 31, 2018			
TFIC	13,754	$ 354,842	$ 354,842
December 31, 2017			
TFIC	13,754	$ 435,300	$ 435,300

Under the Securities and Exchange Act, the Corporation shall neither pledge treasury stocks nor exercise stockholders' rights on these stocks, such as rights to dividends and to vote. The subsidiaries holding treasury stock, however, retain stockholders' rights, except the rights to participate in any stock issuance for cash and to vote.

26. NET PROFIT

a. Interest expense

	For the Year Ended December 31	
	2018	2017
Interest on bank loans	$ 325,614	$ 293,866
Interest on loans from related parties (Note 32)	42,393	50,345
Other interest expense	31	29
	$ 368,038	$ 344,240

Information about capitalized interest was as follows:

	For the Year Ended December 31	
	2018	2017
Capitalized interest	$ 993	$ 2,566
Capitalization rate	0.41%-1.18%	0.40%-1.36%

b. Depreciation and amortization

	For the Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 1,064,496	$ 1,020,404
Intangible assets (included other assets)	18,621	18,282
Investment properties	82	83
	$ 1,083,199	$ 1,038,769
An analysis of depreciation by function		
Operating costs	$ 1,012,988	$ 979,657
Operating expenses	51,508	40,747
Non-operating expenses and losses	82	83
	$ 1,064,578	$ 1,020,487
An analysis of amortization by function		
Operating costs	$ 14,190	$ 13,977
Operating expenses	4,431	4,305
	$ 18,621	$ 18,282

c. Employee benefits expense

	For the Year Ended December 31	
	2018	2017
Salary expense	$ 580,395	$ 564,419
Insurance expense	54,535	50,249
Post-employment benefits (Note 24)		
Defined contribution plans	29,628	27,709
Defined benefit plans	15,331	15,152
Other employee benefits	106,174	92,766
Total employee benefits expense	$ 786,063	$ 750,295
An analysis of employee benefits expense by function		
Operating costs	$ 478,507	$ 458,086
Operating expenses	307,556	292,209
	$ 786,063	$ 750,295

In compliance with the Articles, the Corporation accrued employees' compensation and remuneration of directors and supervisors at the rates from 1% to 2% and no higher than 1%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. However, if the Corporation has accumulated any deficit, the profit should be set aside for offsetting the losses. The accrued employees' compensation and remuneration of directors and supervisors was $47,960 thousand and $47,938 thousand for the year ended December 31, 2018 and 2017.

If there is a change in the amounts after the annual consolidated financial statements were authorized for issue, the differences are recorded as a change in the accounting estimate.

Information on the employees’ compensation and remuneration of directors and supervisors resolved by the Corporation’s board of directors in 2019 and 2018 are available on the Market Observation Post System website of the TWSE.

27. INCOME TAXES

a. Major components of income tax recognized in profit or loss are as follows:

	For the Year Ended December 31	
	2018	2017
Current tax		
In respect of the current year	$ 625,414	$ 537,552
Income tax on unappropriated earnings	1,045	-
Adjustments for prior years	14,449	556
	640,908	538,108
Deferred tax		
In respect of the current year	179,683	123,008
Effect of tax rate changes	(27,634)	-
	152,049	123,008
Income tax expense recognized in profit or loss	$ 792,957	$ 661,116

A reconciliation of accounting profit and income tax expense is as follows:

	For the Year Ended December 31	
	2018	2017
Profit before tax	$ 3,180,015	$ 3,057,292
Income tax expense calculated at the statutory rate	$ 636,003	$ 519,740
Nondeductible expenses in determining taxable income	23,952	23,104
Tax-exempt income	(36,917)	(52,892)
Income tax on unappropriated earnings	1,045	-
Unrecognized deductible temporary differences	(28,467)	10,826
Unrecognized loss carryforwards	40,477	31,512
Effect of different tax rate of group entities operating in other jurisdictions	170,049	128,270
Effect of tax rate changes	(27,634)	-
Adjustments for prior years	14,449	556
Income tax expense recognized in profit or loss	$ 792,957	$ 661,116

In 2017, the applicable corporate income tax rate used by the group entities in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 25%.

As the status of the 2019 appropriation of earnings is uncertain, the potential income tax consequences of the 2018 unappropriated earnings are not reliably determinable.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2018	**2017**
Deferred tax		
Effect of tax rate changes	$ 4,389	$ -
In respect of the current year		
Remeasurement on defined benefit plans	(1,730)	3,182
Total income tax recognized in other comprehensive income	$ 2,659	$ 3,182

c. Current tax liabilities

	December 31	
	2018	**2017**
Income tax payable	$ 216,602	$ 345,937

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2018

	Opening Balance	**Recognized in Profit or Loss**	**Recognized in Other Compreh-ensive Income**	**Exchange Differences**	**Closing Balance**
Deferred tax assets					
Recognition of loss on foreign investments using equity method	$ 363,454	$ (66,843)	$ -	$ -	$ 296,611
Defined benefit obligation	52,788	(5,415)	2,659	-	50,032
Others	1,665	(1,665)	-	-	-
	$ 417,907	$ (73,923)	$ 2,659	$ -	$ 346,643
Deferred tax liabilities					
Land revaluation increment tax	$ 341,231	$ -	$ -	$ -	$ 341,231
Property, plant and equipment	235,019	76,936	-	(575)	311,380
Investment properties	14,814	-	-	-	14,814
Others	35,107	1,190	(28,348)	-	7,949
	$ 626,171	$ 78,126	$ (28,348)	$ (575)	$ 675,374

For the year ended December 31, 2017

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Compreh- ensive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Recognition of loss on foreign investments using equity method	$ 447,709	$ (84,255)	$ -	$ -	$ 363,454
Defined benefit obligation	49,606	-	3,182	-	52,788
Others	22,994	(20,674)	-	(655)	1,665
	$ 520,309	$ (104,929)	$ 3,182	$ (655)	$ 417,907
Deferred tax liabilities					
Land revaluation increment tax	$ 341,231	$ -	$ -	$ -	$ 341,231
Property, plant and equipment	217,431	18,079	-	(491)	235,019
Investment properties	14,814	-	-	-	14,814
Others	35,107	-	-	-	35,107
	$ 608,583	$ 18,079	$ -	$ (491)	$ 626,171

e. Income tax assessments

Except for 2015, the Corporation's tax returns through 2016 have been assessed by the tax authorities.

The tax returns of TFIC through 2016 have been assessed by the tax authorities.

28. EARNINGS PER SHARE

	For the Year Ended December 31 2018	2017
Basic earnings per share	$ 2.01	$ 2.01
Diluted earnings per share	$ 2.00	$ 2.00

The earnings and weighted average number of common stock outstanding in the computation of earnings per share were as follows:

Net Profit for the Year

	For the Year Ended December 31 2018	2017
Earnings used in the computation of basic earnings per share	$ 1,750,724	$ 1,749,409

Weighted average number of common stock outstanding (in thousand stocks):

	For the Year Ended December 31	
	2018	2017
Weighted average number of common stock	885,703	885,703
Less: Reclassification of the Corporation's stocks held by subsidiaries	(13,754)	(13,754)
Weighted average number of common stock used in the computation of basic earnings per share	871,949	871,949
Effect of potentially dilutive ordinary shares:		
Employees' compensation or bonuses issued to employees	1,436	996
Weighted average number of ordinary shares used in the computation of diluted earnings per share	873,385	872,945

If the Corporation offered to settle compensation or bonuses paid to employees in cash or shares, the Corporation assumed the entire amount of the compensation or bonuses will be settled in shares, and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

29. OPERATING LEASE ARRANGEMENTS

The Group as Lessor

Operating leases relate to leasing the investment properties owned by the Corporation with lease terms between 2 to 10 years. According to the agreement, the lease can be terminated by either party by giving 2 to 3 months formal notice in writing to the other party.

30. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stockholders through the optimization of the debt and equity balance. The capital structure of the Group consists of bank loans and equity of the Group.

Financial management department of the Group reviews the capital structure on a monthly basis. As part of this review, the financial management department considers whether there were exceptions between consolidated current ratio, consolidated debt ratio and the target ratio set by the financial management department.

31. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments that are not measured at fair value

   Management believes the carrying amounts of non-financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values or the fair values cannot be reliably measured.

b. Fair value of financial instruments that are measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Domestic listed shares	$ 14,480	$ -	$ -	$ 14,480
Domestic mutual funds	63,589	-	-	63,589
	$ 78,069	$ -	$ -	$ 78,069
Financial assets at FVTOCI				
Investments in equity instruments at FVTOCI				
Domestic listed shares	$ 1,272,070	$ -	$ -	$ 1,272,070
Domestic unlisted shares	-	-	4,035,348	4,035,348
	$ 1,272,070	$ -	$ 4,035,348	$ 5,307,418

The financial asset at fair value through profit and loss and the available-for-sale financial asset at fair value through profit and loss in the consolidated financial statements belong to Level 1 fair value measurement for the year ended December 31, 2017.
There were no transfers between Levels 1 and 2 in 2018 and 2017.

2) Valuation techniques and assumptions applied for the purpose of measuring fair value

a) The fair value of financial instruments traded in active markets is based on quoted market prices (including beneficiary certificates that went public).

b) Valuation techniques and inputs applied for Level 3 fair value measurement: The significant and unobservable input parameter for unlisted investments use market-based approach mainly relates to liquidity discount rate. Market-based approach adopts the equity basis multiplier (P/B) of comparable listed companies, the fair price of the Company's stock is calculated after considering the liquidity discount parameter.

c. Categories of financial instruments

	December 31	
	2018	2017
Financial assets		
Fair value through profit or loss (FVTPL)		
Held for trading	$ -	$ 32,240
Mandatorily classified as at FVTPL	78,069	-
Loans and receivables (Note 1)	-	4,240,328
Available-for-sale financial assets (Note 2)	-	4,709,174
Financial assets at amortized cost (Note 3)	4,067,268	-
Financial assets at FVTOCI		
Equity instruments	5,307,418	-
Financial liabilities		
Amortized cost (Note 4)	16,338,145	16,339,270

Note 1 The balances include loans and receivables measured at amortized cost, which comprise cash and cash equivalents, debt investments with no active market, notes receivable, trade receivables and other receivables.

Note 2 The balances include the carrying amount of available-for-sale financial assets and financial assets measured at cost.

Note 3 The balances include financial assets at amortized cost, which comprise cash and cash equivalents, debt investments, notes receivable, trade receivables and other receivables.

Note 4 The balances include financial liabilities at amortized cost, which comprise short-term and long-term loans, short-term bills payable, notes payable, trade payables and other payables, current portion of long - term borrowing and guarantee deposits.

d. Financial risk management objectives and policies

The Group's major financial instruments included equity and debt investments, trade receivables, trade payables and borrowings. The Group's Corporate Treasury function provides services to the business, monitors and manages the financial risks relating to the operations of the Group through internal risk evaluation. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates and interest rates.

a) Foreign currency risk

The Group had foreign currency sales and purchases, which exposed the Group to foreign currency risk. To protect against reductions foreign assets in value and the volatility of future cash flows caused by changes in foreign exchange rates, the Group managed the risk by balancing positions of assets and liabilities denominated in foreign currencies.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities and of the derivatives exposed to foreign currency risk at the end of the reporting period are set out in Note 35.

<u>Sensitivity analysis</u>

The Group was mainly exposed to the USD, EUR, RMB and HKD.

The following details the effects of a 5% increase in NTD (the functional currency) against the relevant foreign currencies. For a 5% strengthening of NTD against the relevant currency, the net profit would be increase of $99,375 thousand and $146,118 thousand for the years ended December 31, 2018 and 2017, respectively. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rate is 5%.

b) Interest rate risk

The Group was exposed to interest rate risk because entities in the Group borrowed funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix of fixed and floating rate borrowings, ensuring the most cost-effective hedging strategies are applied.

The carrying amount of the Group's financial assets and financial liabilities with exposure to interest rates at the end of the reporting period were as follows:

	December 31	
	2018	**2017**
Fair value interest rate risk		
Financial assets	$ 232,334	$ 136,375
Financial liabilities	10,238,458	9,980,501
Cash flow interest rate risk		
Financial assets	1,727,863	1,058,967
Financial liabilities	2,380,000	3,131,817

Sensitivity analysis

The sensitivity analyses below were determined based on the Group's exposure to interest rates at the end of the reporting period. A 50 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 50 basis points higher/lower and all other variables were held constant, the Group's net profit for the years ended December 31, 2018 and 2017 would decrease/increase by $3,261 thousand and $10,364 thousand, respectively, which was mainly attributable to the Group's exposure to interest rates on its cash flow by variable-rate bank loans.

c) Other price risk

The Group was exposed to equity price risk through its investments in listed equity securities and beneficiary certificates of open-end funds.

Sensitivity analysis

The sensitivity analyses below were determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 5% higher/lower, pre-tax profit for the year ended December 31, 2018 would have increased/decreased by $3,903 thousand, as a result of the changes in fair value of financial assets at FVTPL, and the pre-tax other comprehensive income for the year ended December 31, 2018 would have increased/decreased by $63,604 thousand, as a result of the changes in fair value of financial assets at FVTOCI.

If equity prices had been 5% higher/lower, net profit for the year ended December 31, 2017 would have increased/decreased by $1,612 thousand, as a result of the changes in fair value of held-for-trading investments and the other comprehensive income for the year ended December 31, 2017 would decrease/increase by $58,364 thousand, as a result of the changes in fair value of available-for-sale shares.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. As at the end of the reporting period, the Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure of counterparties to discharge an obligation and financial guarantees provided by the Group could arise from:

a) The carrying amount of the respective recognized financial assets as stated in the balance sheets; and

b) The amount of contingent liabilities in relation to financial guarantee issued by the Group.

The Group adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group only transacts with entities that are rated good. The Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the credit organization.

Trade receivables consisted of a large number of unrelated customers. Ongoing credit evaluation is performed on the financial condition of trade receivables.

Credit risk represents the potential impact to financial asset that the Group might encounter if counterparties or third parties breach the contracts. The Group evaluated credit risk exposure for contracts with positive carrying value. The Group evaluated the credit risk exposure as immaterial because all counterparties are reputable financial institutions and companies with credit ratings.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Group relies on bank borrowings as a significant source of liquidity. As of December 31, 2018 and 2017, the Group had available unutilized bank loan facilities set out in (b) below.

a) Liquidity and interest risk rate tables

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay.

December 31, 2018

	On Demand or Less than 1 Month	**1-3 Months**	**3 Months to 1 Year**	**1-5 Years**
Non-interest bearing	$ -	$ 2,910,954	$ -	$ -
Variable interest rate liabilities	-	-	-	2,404,565
Fixed interest rate liabilities	2,279,649	2,063,069	1,306,997	4,661,365
	$ 2,279,649	$ 4,974,023	$ 1,306,997	$ 7,065,930

December 31, 2017

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-interest bearing	$ -	$ 2,427,583	$ -	$ -
Variable interest rate liabilities	-	-	-	3,232,570
Fixed interest rate liabilities	649,700	1,423,132	3,735,636	4,257,789
	$ 649,700	$ 3,850,715	$ 3,735,636	$ 7,490,359

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates differ from those estimates of interest rates determined at the end of the reporting period.

b) Financing facilities

	December 31	
	2018	2017
Unsecured bank borrowing limit		
Amount used	$ 16,889,000	$ 15,433,000
Amount unused	12,552,000	11,417,000
	$ 29,441,000	$ 26,850,000
Secured bank borrowing limit		
Amount used	$ -	$ 130,000
Amount unused	130,000	-
	$ 130,000	$ 130,000

32. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Corporation and its subsidiaries, which are related parties of the Corporation, have been eliminated on consolidation and are not disclosed in this note. The prices and payment terms of these transactions were similar to those for third parties. Details of transactions between the Group and other related parties are disclosed below.

Related Party Name	Related Party Category
Far Eastern New Century Corp.	Investors with significant influence over the Group
Hwa Xu Heat Supply Co. (HXYZ)	Associates
Oriental Petrochemical (Shanghai) Corp.(OPSC)	Associates
Asia Cement Corp.	Others
Fu Ming Transport Corp.	Others
Fu Da Transport Corp.	Others
PET Far Eastern (Holding) Ltd.	Others
Far Eastern International Bank (FEIB)	Others

(Continued)

Related Party Name	Related Party Category
Far Eastern Industries (Shanghai) Ltd	Others
Far Eastern Industries (Yangzhou) Ltd	Others
Yuan Ding Investment Corp.	Others
Shanghai Yuanhua Logistics (Yangzhou) Co.	Others
Hong Zhan International Ltd.	Others
Nan Hwa Cement Corp.	Others
Shanghai Yuanzi Information Technology Ltd.	Others
Far Eastern Dyeing & Finishing (Suzhou) Ltd.	Others

(Concluded)

a. Sale of goods

	For the Year Ended December 31	
	2018	2017
Investors that have significant influence over the Group	$ 1,911,394	$ 1,764,391
Others	325,219	70,484
	$ 2,236,613	$ 1,834,875

b. Purchase of goods

	For the Year Ended December 31	
	2018	2017
Associates	$ 364,355	$ 360,615
Others	1,570,160	8,409
	$ 1,934,515	$ 369,024

c. Operating expenses

	For the Year Ended December 31	
	2018	2017
Others		
Fu Ming Transport Corp.	$ 172,765	$ 156,166
Others	113,961	158,252
	286,726	314,418
Associates	7,232	11,510
	$ 293,958	$ 325,928

d. Interest expense

	December 31	
	2018	2017
Others	$ 42,393	$ 50,345

e. Rental income

	For the Year Ended December 31	
	2018	2017
Others		
Fu Da Transport Corp.	$ 9,694	$ 7,039

f. Cash and cash equivalents

	December 31	
	2018	2017
Others	$ 72,530	$ 76,371

g. Receivables from related parties

	December 31	
	2018	2017
Others	$ 10,911	$ 19,906
Investors with significant influence over the Group		
Far Eastern New Century Corp.	59,272	147,979
	$ 70,183	$ 167,885

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2018 and 2017, no impairment loss was recognized for trade receivables from related parties.

h. Prepayments

	December 31	
	2018	2017
Associates		
HXYZ	$ 950,029	$ 411,344
Current	$ 290,896	$ 411,344
Non-current (Note 20)	659,133	-
	$ 950,029	$ 411,344

HXYZ hasn't enhanced the rate of capacity utilization so far, in order to maintain the operational needs of stable heating-steam supply, the Group adopted the prepayment method in transaction.

i. Other receivables

	December 31	
	2018	2017
Associates		
HXYZ	$ 10,051	$ 13,155

j. Financial assets at amortized cost (Debt investments with no active market)

	December 31	
	2018	2017
Others		
FEIB	$ 60,401	$ 59,409

k. Loans from related parties (accounted for as short-term borrowings)

	December 31	
	2018	2017
Others		
Far Eastern Industries (Shanghai) Co., Ltd.	$ -	$ 910,900
Far Eastern Industries (Yangzhou) Co., Ltd.	-	546,540
Others	-	318,814
	$ -	$ 1,776,254

The Group obtained loans at rates comparable to market interest rates for the loans from related parties.

l. Payables to related parties

	December 31	
	2018	2017
Associates	$ 1,990	$ 8,316
Others	-	1,797
	$ 1,990	$ 10,113

m. Other payables

	December 31	
	2018	2017
Others	$ 102,558	$ 191,608
Associates	7,319	13,979
	$ 109,877	$ 205,587

n. Acquisitions of financial assets

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Purchase Price
Others			Shares	
Hong Zhan International Ltd.	Financial assets at FVTOCI	10,000,000	Everest Textile Co., Ltd.	$ 130,130

There was no acquisitions of financial assets in 2017.

o. Acquisitions of investment

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Purchase Price
Others			Shares	
Oriental Petrochemical (Taiwan) Corp.	Financial assets at FVTOCI	54,026,152	Oriental Petrochemical (Taiwan) Corp.	$ 540,262

For the year ended December 31, 2017

	Line Item	Number of Shares	Underlying Assets	Purchase Price
Others			Shares	
Oriental Petrochemical (Taiwan) Corp.	Financial assets measured at cost - non-current	36,017,435	Oriental Petrochemical (Taiwan) Corp.	$ 360,174

p. Disposals of investment accounted for using equity method

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Purchase Price	Gain (Loss) on Disposal
Others			Shares		
Yuan Ding Investment Corp.	Investment accounted for using equity method	14,675,271	Oriental Resource Development Ltd.	$ 170,747	$ 18,966

There was no disposal of investment accounted for using equity method in 2017.

q. Disposals of financial assets

For the year ended December 31, 2017

	Line Item	Number of Shares	Underlying Assets	Proceeds	Gain (Loss) on Disposal
Others			Shares		
Yuan Tong Investment Co., Ltd.	Available-for-sale financial assets - non-current	54,103,774	Far Eastern International Bank	$ 533,485	$ 156,070

There was no disposal of financial assets in 2018.

r. Compensation of key management personnel

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 35,661	$ 28,844
Post-employment benefits	432	432
	$ 36,093	$ 29,276

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

33. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets had been pledged or mortgaged as collateral for credit lines of deposit overdrafts, as refundable deposits with the Harbor Bureau or Customs Bureau and as guarantees for sales:

	December 31	
	2018	2017
Pledge deposits (financial assets at amortized cost/debt investments with no active market)	$ 76,968	$ 75,976

As of December 31, 2018, the Corporation pledged 28,599 thousand stocks of the subsidiary TFIC as security.

34. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of December 31, 2018 and 2017 were as follows:

a. As of December 31, 2018, unused letters of credit for purchases of raw materials amounted to approximately $3,226,028 thousand, purchase guarantees from banking institution amounted to $451,000 thousand, refundable deposit with the Harbor Bureau amounted to $216,389 thousand, and project performance bond amounted to $4,479 thousand, respectively.

b. Endorsements/guarantees provided to subsidiaries and associates

The Corporation

TFIC	$ 950,000
PPL	921,450
OUCC (Bermuda)	1,535,750
OPYC	921,450
FUPY	460,725
	$ 4,789,375

FUPY

HXYZ	$ 111,659

c. The Corporation has a long-term ethylene purchase agreement with Chinese Petroleum Corporation, Taiwan under which the Corporation is committed to purchase ethylene until December 31, 2018. The purchase price under the agreement is in U.S. dollars.

d. The Corporation has a three-year agreement beginning from 2004, to sell ethylene glycols to major customers, namely, Far Eastern New Century Corporation, Tainan Spinning Co., Ltd., and Shinkong Synthetic Fibers Corporation. The agreement is automatically renewed for successive periods of three years unless otherwise terminated by either party with prior notice. The determined price under the agreement is in U.S. dollars.

e. In May 2016, the Corporation signed a five-year ethylene carbonate designated production/sales agreement with Chi Mei Corporation ("CMC"). Also, the Corporation agreed to purchase from CMC any qualified ethylene glycol by-products which are produced during the manufacturing process. And the purchase price is determined by agreed upon bases. Both sides agreed that the Corporation could sell part of the output to a specific-purpose market.

35. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group entities' significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
RMB	$ 145,785	4.48 (RMB:NTD)	$ 652,434
USD	20,214	30.72 (USD:NTD)	620,873
USD	560	6.86 (USD:RMB)	17,200
EUR	261	7.86 (EUR:RMB)	9,187
			$ 1,299,694
Non-monetary items			
Investments accounted for using equity method			
RMB	489,100	4.48 (RMB:NTD)	$ 2,188,879
Financial liabilities			
Monetary items			
USD	28,557	30.72 (USD:NTD)	$ 877,128
USD	78,299	6.86 (USD:RMB)	2,404,954
EUR	143	35.20 (EUR:NTD)	5,034
EUR	2	7.86 (EUR:RMB)	70
			$ 3,287,186

December 31, 2017

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
RMB	$ 77,917	4.55 (RMB:NTD)	$ 354,873
USD	3,216	29.76 (USD:NTD)	95,708
USD	411	6.53 (USD:RMB)	12,231
EUR	261	7.81 (EUR:RMB)	9,284
			$ 472,096
Non-monetary items			
Investments accounted for using equity method			
RMB	454,631	4.55 (RMB:NTD)	$ 2,070,616
Financial liabilities			
Monetary items			
USD	29,981	29.76 (USD:NTD)	$ 892,235
USD	72,105	6.53 (USD:RMB)	2,145,845
EUR	136	35.57 (EUR:NTD)	4,838
EUR	78	7.81 (EUR:RMB)	2,774
HKD	91,608	0.84 (HKD:RMB)	348,765
			$ 3,394,457

The significant realized and unrealized foreign exchange gains (losses) were as follows:

	For the Year Ended December 31			
	2018		2017	
Foreign Currencies	Exchange Rate	Net Foreign Exchange Gain (Loss)	Exchange Rate	Net Foreign Exchange Gain (Loss)
NTD	1 (NTD:NTD)	$ (5,798)	1 (NTD:NTD)	$ 22,095
RMB	4.56 (RMB:NTD)	(9,209)	4.51 (RMB:NTD)	37,707
		$ (15,007)		$ 59,802

36. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions and investees

1) Financing provided to others. (Table 1)

2) Endorsements/guarantees provided. (Table 2)

3) Marketable securities held. (Table 3)

4) Marketable securities acquired and disposed at costs or prices at least NT$300 million or 20% of the paid-in capital. (Table 4)

5) Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital. (None)

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital. (None)

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 5)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 6)

9) Trading in derivative instruments. (None)

10) Intercompany relationships and significant intercompany transactions. (Table 7)

11) Information on investees. (Table 8)

b. Information on investments in mainland China

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, net income of investees, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investment in the mainland China area. (Table 9)

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses. (None)

37. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on types of goods or services delivered or provided. Specifically, the Group's reportable segments under IFRS 8 "Operating Segments" were as follows:

- Ethylene glycols business
- Special chemicals business
- Gas business
- Investment and others

a. Segment revenues and results

The following was an analysis of the Group's revenue and results by reportable segments.

	Segment Revenues For the Year Ended December 31		Segment Profit (Loss) For the Year Ended December 31	
	2018	2017	2018	2017
Ethylene glycols business	$ 26,793,969	$ 23,948,919	$ 2,897,424	$ 2,775,660
Special chemicals business	5,448,345	5,598,082	(127,714)	69,866
Gas business	1,700,791	1,683,546	395,244	363,929
Investment and others	17,648	44,234	(16,524)	13,669
Other eliminations and adjustments	(1,844,936)	(2,354,971)	150,211	278,597
Total operating segments	$ 32,115,817	$ 28,919,810	3,298,641	3,501,721
Non-operating income and expense			(118,626)	(444,429)
Profit before income tax			$ 3,180,015	$ 3,057,292

Segment profit represents the profit earned by each segment. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

b. Segment total assets

	December 31	
	2018	2017
Segment assets		
Ethylene glycols business	$ 16,144,299	$ 16,242,281
Special chemicals business	4,979,602	5,512,989
Gas business	2,597,895	2,862,656
Investment and others	26,665,277	24,391,043
Other eliminations and adjustments	(13,988,853)	(13,057,111)
Total segment assets	$ 36,398,220	$ 35,951,858

c. Geographical information

The Group's revenue from external customers by location of operations and information about its non-current assets by location of assets are mainly in Asia.

d. Information about major customers

There were no single customers whose revenue comprised up to 10% of the Group's total revenue in 2018 and 2017.

TABLE 1

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

FINANCINGS PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

No.	Lender	Borrower	Financial Statement Account	Related Parties	Highest Balance for the Period	Ending Balance	Actual Borrowing Amount	Interest Rate	Nature of Financing	Business Transaction Amounts	Reasons for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrower	Aggregate Financing Amount Limits	Note
													Item	Value			
1	PPL	TDIY	Receivables - related parties	Yes	$ 92,600	$ -	$ -	-	Necessary for short-term financing	$ -	Operating capital	$ -	-	$ -	40% of net worth of the Corporation $2,537,805	40% of net worth of the Corporation $2,537,805	
		OUCC (Bermuda)	Receivables - related parties	Yes	340,505	322,508	322,508	-	Necessary for short-term financing	-	Operating capital	-	-	-	200% of net worth of the Corporation $12,689,027	200% of net worth of the Corporation $12,689,027	
2	OUCC (Bermuda)	OPYC	Receivables - related parties	Yes	599,808	447,532	447,532	-	Necessary for short-term financing	-	Operating capital	-	-	-	200% of net worth of the Corporation $757,575	200% of net worth of the Corporation $757,575	
3	FUPY	HXYZ	Other receivables-related parties loans	Yes	234,300	223,766	-	-	Necessary for short-term financing	-	Operating capital	-	-	-	40% of net worth of the Corporation $1,974,495	40% of net worth of the Corporation $1,974,495	
		Far Eastern Industries (Suzhou) Ltd.	Other receivables-related parties loans	Yes	138,107	-	-	-	Necessary for short-term financing	-	Operating capital	-	-	-	40% of net worth of the Corporation $1,974,495	40% of net worth of the Corporation $1,974,495	

TABLE 2

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

No.	Endorser/ Guarantor	Endorsee/Guaranteed		Limits on Endorsement/ Guarantee Given on Behalf of Each Party	Maximum Amount Endorsed/ Guaranteed During the Period	Outstanding Endorsement/ Guarantee at the End of the Period	Actual Borrowing Amount	Amount Endorsed/ Guaranteed by Collaterals	Ratio of Accumulated Endorsement/ Guarantee to Net Equity in Latest Financial Statements (%)	Aggregate Endorsement/ Guarantee Limit	Endorsement/ Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Relationship											
0	The Corporation	TFIC	2	50% of net worth of the Corporation $7,483,591	$ 950,000	$ 950,000	$ 559,000	$ -	6.35	100% of net worth of the Corporation $14,967,182	Y	N	N	
		PPL	2	50% of net worth of the Corporation $7,483,591	1,313,775	921,450	-	-	6.16	100% of net worth of the Corporation $14,967,182	Y	N	N	
		OUCC (Bermuda)	2	50% of net worth of the Corporation $7,483,591	1,897,675	1,535,750	383,938	-	10.26	100% of net worth of the Corporation $14,967,182	Y	N	N	
		OPYC	2	50% of net worth of the Corporation $7,483,591	1,347,750	921,450	514,662	-	6.16	100% of net worth of the Corporation $14,967,182	Y	N	Y	
		FUPY	2	50% of net worth of the Corporation $7,483,591	1,191,470	460,725	366,529	-	3.08	100% of net worth of the Corporation $14,967,182	Y	N	Y	
1	FUPY	HXYZ	6	50% of net worth of the Corporation $2,468,119	233,831	111,659	111,435	-	2.26	100% of net worth of the Corporation $4,936,237	N	N	Y	

Note: The relationships between the endorser/guarantor and the endorsee/guaranteed are listed below:

2. Represents the entity whose voting shares are exceed fifty percent (50%) owned directly or indirectly by the Corporation.

6. Represents the entity is guaranteed by the percentage of ownership to the entity under the mutual investment.

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Number of Stocks/Units	Carrying Amount	Percentage of Ownership (%)	Fair Value	
The Corporation	HSBC Global Themes Fund of Funds	-	Financial assets mandatorily classified as at FVTPL - current	5,754,696	$ 63,589	-	$ 63,589	Note 1
	Far Eastern Department Stores Ltd.	Same chairman	Financial assets at FVTOCI - non-current	14,378,228	225,738	1	225,738	Note 2
	Far Eastern New Century Corp.	Same chairman	Same as above	6,888,446	192,188	-	192,188	Note 2
	Asia Cement Corp.	Same chairman	Same as above	8,486,315	288,110	-	288,110	Note 2
	Everest Textile Co., Ltd.	The chairman of Everest Textile Co., Ltd. is a director of the Corporation	Same as above	12,633,023	146,543	3	146,543	Note 2
	Oriental Petrochemical (Taiwan) Co., Ltd.	The Corporation is one of its director	Same as above	282,033,256	2,510,096	14	2,510,096	Note 3
	Grand Cathay Venture Capital Co., Ltd.	-	Same as above	26,666,667	228,000	17	228,000	Note 3
	Eminent Venture Capital Corporation	-	Same as above	4,500,000	24,211	10	24,211	Note 3
	Eminent II Venture Capital Corporation	-	Same as above	6,000,000	47,400	6	47,400	Note 3
	Tai An Technologies Corp.	-	Same as above	249,999	3,992	5	3,992	Note 3
TFIC	Taiwan Semiconductor Manufacturing Co., Ltd	-	Financial assets mandatorily classified as at FVTPL - current	35,000	7,893	-	7,893	Note 2
	Quanta Computer Inc.	-	Same as above	125,000	6,587	-	6,587	Note 2
	The Corporation	Treasury stock	Financial assets mandatorily classified as at FVTPL - non-current	13,753,554	354,842	2	354,842	Note 2
	Far Eastern International Commercial Bank (“FEIC”)	The chairman of the Corporation is FEIC’s director	Same as above	28,628,630	286,286	1	286,286	Note 2
	Everest Textile Co., Ltd.	The chairman of Everest Textile Co., Ltd. is the Corporation’s parent corporation’s director	Same as above	11,483,184	133,205	2	133,205	Note 2
	Yue Ding Enterprise Corp.	Related party in substance	Same as above	4,947,144	74,949	5	74,949	Note 3
	Ding Shen Investment Co., Ltd.	Related party in substance	Same as above	39,600,000	345,312	18	345,312	Note 3
	Oriental Petrochemical (Taiwan) Co., Ltd.	The Corporation is one of its director	Same as above	90,043,587	801,388	4	801,388	Note 3

Note 1: The net asset value of the fund as of December 31, 2018.

Note 2: The market value was calculated at closing price on December 31, 2018 provided by the TWSE.

Note 3: The net asset value was calculated based on the latest assessment.

Note 4: The information about investment in subsidiaries and associates, refer to Tables 8 and 9.

TABLE 4

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counterparty (Note)	Relationship (Note)	Beginning Balance		Acquisition		Disposal				Ending Balance	
					Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount	Carrying Amount	Gain (Loss) on Disposal	Number of Shares	Amount
TFIC	Stocks Oriental Petrochemical (Taiwan) Co., Ltd.	Financial assets at FVTOCI - non-current	-	-	36,017,435	360,174	54,026,152	$ 540,262	-	-	-	-	90,043,587	$ 900,436

Note: Investors whose marketable securities are accounted for using the equity method must fill out those columns, the rest will be exempted.

TABLE 5

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

TOTAL PURCHASE FROM OR SALE TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/ Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
The Corporation	Far Eastern New Century Corp.	Same chairman	Sale	$ (1,911,394)	(6)	Same as those to unrelated parties	-	-	$ 59,272	3	-
FUPY	OPYC	Same parent	Sale	(1,108,174)	(3)	Same as those to unrelated parties	-	-	261,385	13	-
	Far Eastern Industries (Shanghai) Ltd.	Others	Sale	(207,533)	(1)	Same as those to unrelated parties	-	-	-	-	-
TDIY	FUPY	Same parent	Sale	(730,953)	(2)	Same as those to unrelated parties	-	-	144,242	7	-
			Purchase	560,757	2	Same as those to unrelated parties	-	-	(105,981)	(4)	-
FUPY	HXYZ	Equity-method investee	Purchase	318,102	1	Same as those to unrelated parties	-	-	-	-	-
	Pet Far Eastern (Holding) Ltd.	Others	Purchase	1,568,623	6	Same as those to unrelated parties	-	-	-	-	-

TABLE 6

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance		Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Impairment Loss
						Amount	Actions Taken		
The Corporation	Far Eastern New Century Corporation	Same chairman	Receivables	$ 59,272	18.45	$ -	-	$ 59,272	$ -
PPL	OUCC (Bermuda)	Same parent	Other receivables - non-current	322,508	Note	-	-	-	-
	FUPY	Subsidiary	Other receivables	135,669	-	-	-	-	-
OUCC (Bermuda)	OPYC	Subsidiary	Other receivables	447,532	Note	-	-	-	-
TDIY	FUPY	Same parent	Receivables	144,242	6.59	-	-	144,242	-
FUPY	OPYC	Same parent	Receivables	261,385	5.17	-	-	261,385	-
	TDIY	Same parent	Other receivables	105,981	-	-	-	58,698	-

Note: The ending balance is primarily consisted of other receivables which include borrowings.

TABLE 7

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

No.	Investee Company	Counterparty	Relationship (Note)	Transaction Details			
				Financial Statement Accounts	Amount	Transaction Terms	% to Total Sales or Assets
1	PPL	OUCC (Bermuda)	c	Other receivables - non-current	$ 322,508	Based on terms agreed upon by both parties	1
		FUPY	c	Other receivables	135,669	Based on terms agreed upon by both parties	-
		OPYC	c	Other receivables	69,233	Based on terms agreed upon by both parties	-
2	OUCC (Bermuda)	OPYC	c	Other receivables	447,532	Based on terms agreed upon by both parties	1
3	FUPY	OPYC	c	Notes receivable	217,331	Based on terms agreed upon by both parties	1
				Trade receivables	44,054	Based on terms agreed upon by both parties	-
				Sales revenue	1,108,174	Based on terms agreed upon by both parties	3
		TDIY	c	Other receivables	105,981	Based on terms agreed upon by both parties	-
				Other income	96,651	Based on terms agreed upon by both parties	-
4	TDIY	FUPY	c	Notes receivable	69,049	Based on terms agreed upon by both parties	-
				Trade receivables	75,193	Based on terms agreed upon by both parties	-
				Sales revenue	730,953	Based on terms agreed upon by both parties	2
5	OPYC	FUPY		Rental income	46,459	Based on terms agreed upon by both parties	-

Note:
a. From parent to subsidiary.
b. From subsidiary to parent.
c. Between subsidiaries.

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or Foreign Currency)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		As of December 31, 2018			Net Income (Loss) of the Investee	Share of Profits (Loss)	Note
				December 31, 2018	December 31, 2017	Stocks	%	Carrying Amount			
The Corporation	PPL	British Virgin Islands	Investment	US$ 192,972	US$ 192,972	148,356	100	$ 6,177,584	$ 882,623	$ 882,623	
	TFIC	Taipei City, ROC	Enterprise and financial institution investments	$ 1,110,000	$ 860,000	143,444,736	100	1,155,105	29,152	5,084	Note 1
	OUCC (Bermuda)	British Bermuda Islands	Investment	US$ 70,000	US$ 70,000	39,508	100	378,787	(227,717)	(227,717)	
	KPTC	Taipei City, ROC	Petroleum and petrochemical products	-	109,463	-	-	-	7	1	Note 2

Note 1: The ending balance includes 28,599,328 stocks pledged to financial institutions.

Note 2: Liquidation process of KPTC completed in April 2018.

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

INFORMATION OF INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2018	Investment Flows		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss)	Carrying Amount as of December 31, 2018	Accumulated Repatriation of Investment Income as of December 31, 2018	Note
					Outflow	Inflow							
OPSC	Manufacture and sale of purified terephthalic acid.	US$ 241,310	Indirect	US$ 92,886	US$ -	US$ -	US$ 92,886	RMB 151,781	39	$ 267,480 (Note 2)	$ 2,039,984	$ -	
OPYC	Manufacturing and selling ethanolamine (EA) and alcohol ethoxylates (AEO).	US$ 70,000	Indirect	US$ 70,000	US$ -	US$ -	US$ 70,000	RMB (37,867)	100	(172,668) (Note 2)	637,208	-	
FUPY	Manufacture and sale of ethylene glycol, diethylene glycol, triethylene glycol and ethylene oxide.	US$ 132,000	Indirect	US$ 66,000	US$ -	US$ -	US$ 66,000	RMB 233,129	50	531,845 (Note 2)	2,455,089	-	Note 3
TDIY	Manufacturing and selling gas oxygen, gas nitrogen, liquid oxygen, liquid nitrogen and liquid argon and the warehousing management of ethylene.	US$ 67,000	Indirect	US$ 33,500	US$ -	US$ -	US$ 33,500	RMB 45,973	50	104,815 (Note 2)	1,152,414	-	Note 3
HXYZ	The production and sales of hot water (non-potable water) and steam; the erection and maintenance of heat-supply pipelines; the consultancy service in heat-supply technologies.	RMB 160,000	Indirect	-	-	-	-	RMB (47,178)	25%	(107,349) (Note 2)	148,895	-	

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
US$262,386	US$262,386	(Note 1)

Note 1: The Corporation obtained certificate No. 10620425530 from Industrial Development Bureau, Ministry of Economic Affairs according to the "Regulations Governing the Approval of Investment or Technical Cooperation in Mainland China", the accumulation of fund is not limited.

Note 2: Based on audited financial statements.

Note 3: Significant non-controlling interests.

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 6 and 32)	$ 1,910,500	5	$ 1,946,019	6
Financial assets at fair value through profit or loss (Note 7)	78,069	-	32,240	-
Available-for-sale financial assets (Note 10)	-	-	68,711	-
Notes receivable, net (Note 13)	785,625	2	848,921	2
Trade receivables, net (Note 13)	1,162,447	3	1,135,483	3
Trade receivables from related parties (Notes 13 and 32)	70,183	-	167,885	1
Other receivables (Notes 13 and 32)	61,545	-	66,044	-
Inventories (Note 14)	1,630,103	5	2,249,856	6
Prepayments for leases (Note 19)	12,587	-	11,370	-
Prepayments for purchases (Note 32)	326,976	1	600,603	2
Other prepayments	201,199	1	343,538	1
Other current assets (Note 20)	569,124	2	655,082	2
Total current assets	6,808,358	19	8,125,752	23
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income (Notes 8 and 32)	5,307,418	15	-	-
Available-for-sale financial assets (Notes 10 and 32)	-	-	1,098,562	3
Financial assets at amortized cost (Notes 9, 32 and 33)	76,968	-	-	-
Financial assets measured at cost (Notes 11 and 32)	-	-	3,541,901	10
Debt investments with no active market (Notes 12, 32 and 33)	-	-	75,976	-
Investments accounted for using the equity method (Notes 16 and 32)	2,188,879	6	2,231,770	6
Property, plant and equipment (Note 17)	15,063,737	41	15,651,631	43
Construction in progress (Note 17)	934,934	3	1,080,678	3
Investment properties (Note 18)	1,991,654	5	1,991,736	6
Intangible assets	22,811	-	24,642	-
Deferred tax assets (Note 27)	346,643	1	417,907	1
Long-term prepayments for leases (Note 19)	393,617	1	410,543	1
Other non-current assets (Notes 20 and 32)	3,263,201	9	1,300,760	4
Total non-current assets	29,589,862	81	27,826,106	77
TOTAL	$ 36,398,220	100	$ 35,951,858	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 21 and 32)	$ 5,305,133	15	$ 5,093,292	14
Short-term bills payable	300,000	1	232,000	1
Trade payables	2,908,964	8	2,417,470	7
Trade payables to related parties (Note 32)	1,990	-	10,113	-
Other payables (Note 22)	667,978	2	567,228	2
Other payables to related parties (Note 32)	109,877	-	205,587	-
Current tax liabilities (Note 27)	216,602	1	345,937	1
Current portion of long-term borrowings (Note 21)	-	-	400,796	1
Other current liabilities (Note 23)	170,423	-	331,948	1
Total current liabilities	9,680,967	27	9,604,371	27
NON-CURRENT LIABILITIES				
Long-term borrowings (Notes 21 and 33)	7,013,325	19	7,386,230	20
Deferred tax liabilities (Note 27)	675,374	2	626,171	2
Deferred revenue	115,177	-	126,186	-
Net defined benefit liabilities (Note 24)	250,160	1	284,915	1
Guarantee deposits	30,878	-	26,554	-
Other non-current liabilities (Note 23)	44,624	-	-	-
Total non-current liabilities	8,129,538	22	8,450,056	23
Total liabilities	17,810,505	49	18,054,427	50
EQUITY ATTRIBUTABLE TO OWNERS OF THE CORPORATION (Note 25)				
Common stock	8,857,031	24	8,857,031	25
Capital surplus	765,359	2	741,291	2
Retained earnings				
Legal reserve	2,150,280	6	1,976,898	6
Special reserve	1,911,129	5	1,911,129	5
Unappropriated earnings	2,246,662	6	1,733,818	5
Total retained earnings	6,308,071	17	5,621,845	16
Other equity				
Exchange differences on translating foreign operations	(290,555)	(1)	(200,949)	(1)
Unrealized loss on financial assets at fair value through other comprehensive income	(484,926)	(1)	-	-
Unrealized loss on available-for-sale financial assets	-	-	(22,321)	-
Total other equity	(775,481)	(2)	(223,270)	(1)
Treasury stock	(187,798)	-	(187,798)	(1)
NON-CONTROLLING INTERESTS	3,620,533	10	3,088,332	9
Total equity	18,587,715	51	17,897,431	50
TOTAL	$ 36,398,220	100	$ 35,951,858	100

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

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	%	Amount	%
OPERATING REVENUE				
Sales revenue (Note 32)	$ 32,098,169	100	$ 28,875,576	100
Other operating revenue	17,648	-	44,234	-
Total operating revenue	32,115,817	100	28,919,810	100
COST OF GOODS SOLD (Notes 14, 26 and 32)	27,817,014	87	24,475,255	85
GROSS PROFIT	4,298,803	13	4,444,555	15
OPERATING EXPENSES (Notes 26 and 32)				
Selling and marketing expenses	544,834	2	469,717	2
General and administrative expenses	283,003	1	328,513	1
Research and development expenses	172,538	-	144,604	-
Expected credit loss reversed (Note 13)	(213)	-	-	-
Total operating expenses	1,000,162	3	942,834	3
PROFIT FROM OPERATIONS	3,298,641	10	3,501,721	12
NON-OPERATING INCOME AND EXPENSES				
Interest income	54,571	-	20,933	-
Rental income (Note 32)	42,909	-	34,595	-
Dividend income	43,656	-	42,664	-
Other income	118,237	-	121,567	-
Gain on disposal of investments (Note 32)	19,103	-	171,350	1
Foreign currency exchange (loss) gain	(15,007)	-	59,802	-
(Loss) gain on financial assets at fair value through profit or loss	(6,255)	-	2,053	-
Other expenses (Note 26)	(167,934)	-	(155,537)	(1)
Interest expense (Notes 26 and 32)	(368,038)	(1)	(344,240)	(1)
Share of profit (loss) of associates accounted for using equity method	160,132	1	(397,616)	(1)
Total non-operating income and expenses	(118,626)	-	(444,429)	(2)
PROFIT BEFORE INCOME TAX	3,180,015	10	3,057,292	10
INCOME TAX EXPENSE (Note 27)	792,957	2	661,116	2
NET PROFIT FOR THE YEAR	2,387,058	8	2,396,176	8

(Continued)

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Unrealized gain on investments in equity instruments designated as at fair value through other comprehensive income	$ 175,698	1	$ -	-
Remeasurement of defined benefit plans	8,655	-	(18,716)	-
Income tax relating to items that will not be reclassified subsequently to profit or loss	2,659	-	3,182	-
Share of the other comprehensive loss of associates accounted for using equity method	-	-	(57)	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating the financial statement of foreign operations	(117,766)	(1)	(91,513)	-
Unrealized loss on available-for-sale financial assets	-	-	(137,609)	(1)
Share of the other comprehensive loss of associates accounted for using equity method	(39,362)	-	(39,204)	-
Other comprehensive income (loss) for the year, net of income tax	29,884	-	(283,917)	(1)
TOTAL COMPREHENSIVE PROFIT FOR THE YEAR	$ 2,416,942	8	$ 2,112,259	7
NET PROFIT ATTRIBUTED TO:				
Owners of the Corporation	$ 1,750,724	5	$ 1,749,409	6
Non-controlling interests	$ 636,334	2	$ 646,767	2
TOTAL COMPREHENSIVE INCOME ATTRIBUTED TO:				
Owners of the Corporation	$ 1,848,130	6	$ 1,508,935	5
Non-controlling interests	$ 568,812	2	$ 603,324	2
EARNINGS PER SHARE (Note 28)				
Basic	$ 2.01		$ 2.01	
Diluted	$ 2.00		$ 2.00	

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Corporation											
		Capital Surplus		Retained Earnings			Other Equity					
	Common Stock	Paid-in Capital in Excess of Par Value	Treasury Stock	Legal Reserve	Special Reserve	Unappropriated Earnings (Accumulated Deficits)	Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) On Available-for-sale Financial Assets	Treasury Stock	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2017	$ 8,857,031	$ 647,908	$ 267,773	$ 2,457,931	$ 1,911,129	$ (481,033)	$ (113,675)	$ -	$ 115,288	$ (187,798)	$ 2,485,008	$ 15,959,562
Legal reserve used to offset deficits	-	-	-	(481,033)	-	481,033	-	-	-	-	-	-
Cash dividends from capital surplus	-	(177,141)	-	-	-	-	-	-	-	-	-	(177,141)
Net profit for the year ended December 31, 2017	-	-	-	-	-	1,749,409	-	-	-	-	646,767	2,396,176
Other comprehensive loss for the year ended December 31, 2017	-	-	-	-	-	(15,591)	(87,274)	-	(137,609)	-	(43,443)	(283,917)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	-	1,733,818	(87,274)	-	(137,609)	-	603,324	2,112,259
Change in capital surplus from dividends distributed to subsidiary	-	-	2,751	-	-	-	-	-	-	-	-	2,751
BALANCE AT DECEMBER 31, 2017	8,857,031	470,767	270,524	1,976,898	1,911,129	1,733,818	(200,949)	-	(22,321)	(187,798)	3,088,332	17,897,431
Effect of retrospective application and retrospective restatement	-	-	-	-	-	474,168	-	(660,624)	22,321	-	-	(164,135)
Legal reserve	-	-	-	173,382	-	(173,382)	-	-	-	-	-	-
Cash dividends	-	-	-	-	-	(1,549,980)	-	-	-	-	-	(1,549,980)
Net profit for the year ended December 31, 2018	-	-	-	-	-	1,750,724	-	-	-	-	636,334	2,387,058
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	11,314	(89,606)	175,698	-	-	(67,522)	29,884
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	1,762,038	(89,606)	175,698	-	-	568,812	2,416,942
Cash dividends paid to non-controlling interests	-	-	-	-	-	-	-	-	-	-	(36,611)	(36,611)
Change in capital surplus from dividends distributed to subsidiary	-	-	24,068	-	-	-	-	-	-	-	-	24,068
BALANCE AT DECEMBER 31, 2018	$ 8,857,031	$ 470,767	$ 294,592	$ 2,150,280	$ 1,911,129	$ 2,246,662	$ (290,555)	$ (484,926)	$ -	$ (187,798)	$ 3,620,533	$ 18,587,715

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

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	$ 3,180,015	$ 3,057,292
Adjustments :		
Depreciation expenses	1,064,578	1,020,487
Amortization expenses	18,621	18,282
Expected credit loss reversed	(213)	-
Impairment loss reversed on trade receivables	-	(217)
Loss (gain) on financial assets at fair value through profit or loss, net	6,255	(2,053)
Interest expense	368,038	344,240
Interest income	(54,571)	(20,933)
Dividend income	(43,656)	(42,664)
Share of (profit) loss of associates accounted for using equity method	(160,132)	397,616
(Gain) loss on disposal of property, plant and equipment	(193)	8,532
Gain on disposal of investments	(19,103)	(194,580)
Write-downs (reversal of write-downs) of inventories	18,377	(6,480)
Unrealized gain on foreign currency exchange	(37,911)	(78,230)
Amortization of prepayments for leases	9,743	10,043
Changes in operating assets and liabilities		
Financial assets held for trading	-	11,366
Financial assets at fair value through profit or loss	16,627	-
Notes receivable	63,297	(418,754)
Trade receivables	(26,752)	(142,583)
Trade receivables from related parties	97,702	15,678
Other receivables	1,692	(7,171)
Inventories	601,534	(436,269)
Prepayments	(243,167)	(589,023)
Other current assets	85,958	651,312
Notes payable	-	(1,000)
Trade payables	491,494	1,074,915
Trade payables to related parties	(8,123)	(5,400)
Other payables	33,527	207,764
Other current liabilities	(161,525)	(20,395)
Net defined benefit liabilities	(26,100)	(17,805)
Deferred revenue	(8,982)	(8,874)
Other non-current liabilities	44,624	-
Cash generated from operations	5,311,654	4,825,096
Interest received	54,808	26,663
Interest paid	(380,272)	(355,668)
Income tax paid	(766,576)	(235,288)
Net cash generated from operating activities	4,219,614	4,260,803

(Continued)

ORIENTAL UNION CHEMICAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at fair value through other comprehensive income	$ (670,392)	$ -
Proceeds from the capital reduction of financial assets at fair value through other comprehensive income	15,000	-
Purchase of financial assets at amortized cost	(22,498)	-
Proceeds from disposal of financial assets at amortized cost	21,676	-
Proceeds from disposal of available-for-sale financial assets	-	613,336
Purchase of debt investments with no active market	-	(53,143)
Proceeds from sale of debt investments with no active market	-	47,370
Purchase of financial assets measured at cost	-	(360,174)
Proceeds from the capital reduction of financial assets measured at cost	-	40,000
Purchase of investments accounted for using equity method	-	(512,074)
Proceeds from disposal of investments accounted for using equity method	180,257	-
Payments for property, plant and equipment	(194,586)	(9,656)
Proceeds from disposal of property, plant and equipment	7,695	1,540
Payments for intangible assets	(693)	(327)
Increase in other non-current assets	(1,316,118)	(418,933)
Increase in construction in progress	(331,708)	(870,600)
Increase in other prepayments	(1,441)	-
Other dividend received	43,656	42,664
Net cash used in investing activities	(2,269,152)	(1,479,997)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from (repayments of) short-term borrowings	294,521	(1,145,925)
Proceeds from short-term bills payable	68,000	232,000
Proceeds from long-term borrowings	4,087,638	2,288,494
Repayments of long-term borrowings	(4,867,178)	(3,429,894)
Increase (decrease) in guarantee deposits	4,324	(19,257)
Dividends paid to owners of the Corporation	(1,525,912)	(174,390)
Dividends paid to non-controlling interests	(36,611)	-
Net cash used in financing activities	(1,975,218)	(2,248,972)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	(10,763)	(31,527)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(35,519)	500,307
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	1,946,019	1,445,712
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,910,500	$ 1,946,019

The accompanying notes are an integral part of the consolidated financial statements. (Concluded)

6. Financial Report (Stand-alone)

(For the complete financial statements, please see the attachment to the annual report or view the MOPS on http://mops.twse.com.tw/)

Independent auditors' report

(English Translation of a Report Originally Issued in Chinese)

The Board of Directors and Stockholders
Oriental Union Chemical Corporation

Opinion

We have audited the accompanying financial statements of Oriental Union Chemical Corporation (the "Corporation"), which comprise the balance sheets as of December 31, 2018 and 2017, and the statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Corporation as of December 31, 2018 and 2017, 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 Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China ("ROC"). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Corporation in accordance with The Norm of Professional Ethics for Certified Public Accountant of the ROC, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for 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 financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The descriptions of the key audit matters of the financial statements for the year ended December 31, 2018 are as follow:

The Impairment Loss of Property, Plant and Equipment

The balances of property, plant and equipment amounted to $5,756,964 thousand as of December 31, 2018. On each balance sheet date, the Corporation reviews its tangible assets for indications of impairment. If any indication thereof exists, the Corporation then estimates the recoverable amount of the assets. If it is not possible to determine the recoverable amount (fair value less cost to sell and value in use) for the individual asset, then the Corporation will determine the recoverable amount for the asset's cash-generating unit. Because the aforementioned tangible assets represent 24% of total assets and the calculation for recoverable amount involves several assumptions and estimations, which directly impact the amount recognized as impairment losses, we deem the review of impairment of assets a key audit matter.

Corresponding audit procedures:

1. We obtained an understanding of management's estimation of asset impairment and of the design and execution for relevant controls.
2. We evaluated the rationality of management's identification of impairment indicators and the appropriateness of the assumptions. Given that there are impairment indications, we performed:

a. Obtained the asset impairment valuation form produced by the management for each cash-generating unit.

b. Consulted Deloitte firm internal experts regarding the appropriateness of the assumptions, including the classification of cash-generating units, forecast of cash flows, and discount rate.

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

Management is responsible for the preparation and fair presentation of the financial statements in accordance with 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Corporation'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 Corporation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the audit committee, are responsible for overseeing the Corporation's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an 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 ROC will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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

1. Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for 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 Corporation'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 Corporation'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 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 Corporation to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient and appropriate audit evidence regarding the financial information of entities or business activities within the Corporation to express an opinion on the financial statements. We are responsible for the direction, supervision, and performance of the Corporation 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 financial statements for the year ended December 31, 2018 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 Hsin-Wei Tai and Yu-Wei Fan.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 19, 2019

<u>*Notice to Readers*</u>

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

For the convenience of readers, the independent auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the ROC. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and financial statements shall prevail.

ORIENTAL UNION CHEMICAL CORPORATION

BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 6 and 30)	$ 611,802	3	$ 56,083	-
Financial assets at fair value through profit or loss (Note 7)	63,589	-	-	-
Available-for-sale financial assets (Note 10)	-	-	68,711	-
Notes receivable, net (Note 13)	110,542	-	110,844	1
Trade receivables, net (Note 13)	834,999	4	775,984	3
Trade receivables from related parties (Notes 13 and 30)	64,095	-	159,837	1
Other receivables (Note 13)	37,399	-	44,193	-
Inventories (Note 14)	832,598	4	816,441	4
Prepayments for purchases	34,964	-	21,661	-
Other prepayments	23,881	-	16,244	-
Other current assets (Note 18)	170,556	1	193,856	1
Total current assets	2,784,425	12	2,263,854	10
NON-CURRENT ASSETS				
Financial assets at fair value through other comprehensive income (Notes 8 and 30)	3,666,278	15	-	-
Available-for-sale financial assets (Notes 10 and 30)	-	-	744,100	3
Financial assets at amortized cost (Notes 9, 30 and 31)	76,968	-	-	-
Financial assets measured at cost (Note 11)	-	-	2,757,802	12
Debt investments with no active market (Notes 12, 30 and 31)	-	-	75,976	-
Investments accounted for using the equity method (Notes 15 and 30)	7,711,476	32	7,159,272	31
Property, plant and equipment (Note 16)	5,756,964	24	6,053,913	26
Construction in progress (Note 16)	804,568	3	807,764	3
Investment properties (Notes 17 and 27)	1,991,654	8	1,991,736	9
Intangible assets	8,362	-	8,148	-
Deferred tax assets (Note 25)	346,643	2	417,907	2
Other non-current assets (Note 18)	870,378	4	1,000,195	4
Total non-current assets	21,233,291	88	21,016,813	90
TOTAL	$ 24,017,716	100	$ 23,280,667	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Note 19)	$ -	-	$ 110,000	-
Trade payables	800,834	3	680,198	3
Other payables (Notes 20 and 30)	429,834	2	351,428	2
Current tax liabilities (Note 25)	142,016	1	240,138	1
Other current liabilities (Note 21)	81,711	-	95,592	-
Total current liabilities	1,454,395	6	1,477,356	6
NON-CURRENT LIABILITIES				
Long-term borrowings (Notes 19 and 31)	6,629,388	28	6,079,453	26
Deferred tax liabilities (Note 25)	643,497	3	604,320	3
Net defined benefit liabilities (Note 22)	250,160	1	284,915	1
Guarantee deposits	28,470	-	25,524	-
Other non-current liabilities (Note 21)	44,624	-	-	-
Total non-current liabilities	7,596,139	32	6,994,212	30
Total liabilities	9,050,534	38	8,471,568	36
EQUITY (Note 23)				
Common stock	8,857,031	37	8,857,031	38
Capital surplus	765,359	3	741,291	3
Retained earnings				
Legal reserve	2,150,280	9	1,976,898	9
Special reserve	1,911,129	8	1,911,129	8
Unappropriated earnings	2,246,662	9	1,733,818	7
Total retained earnings	6,308,071	26	5,621,845	24
Other equity				
Exchange differences on translating foreign operations	(290,555)	(1)	(200,949)	(1)
Unrealized loss on financial assets at fair value through other comprehensive income	(484,926)	(2)	-	-
Unrealized loss on available-for-sale financial assets	-	-	(22,321)	-
Total other equity	(775,481)	(3)	(223,270)	(1)
Treasury stock	(187,798)	(1)	(187,798)	-
Total equity	14,967,182	62	14,809,099	64
TOTAL	$ 24,017,716	100	$ 23,280,667	100

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

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OPERATING REVENUE				
Sales revenue (Note 30)	$ 14,619,729	100	$ 12,755,671	100
OPERATING COSTS				
Cost of goods sold (Notes 14 and 24)	12,567,843	86	10,850,815	85
GROSS PROFIT	2,051,886	14	1,904,856	15
OPERATING EXPENSES (Notes 24 and 30)				
Selling and marketing expenses	433,809	3	366,973	3
General and administrative expenses	127,236	1	113,087	1
Research and development expenses	160,155	1	144,604	1
Expected credit loss reversed (Note 13)	(213)	-	-	-
Total operating expenses	720,987	5	624,664	5
PROFIT FROM OPERATIONS	1,330,899	9	1,280,192	10
NON-OPERATING INCOME AND EXPENSES				
Interest income	4,346	-	2,519	-
Rental income (Note 30)	39,670	-	34,478	-
Dividend income	43,656	-	42,664	-
Other income (Note 30)	66,495	-	81,686	1
Gain on disposal of investments (Note 30)	19,103	-	171,350	1
Foreign currency exchange gain (loss)	18,486	-	(11,884)	-
Loss on financial assets at fair value through profit or loss	(5,122)	-	-	-
Other expenses	(36,388)	-	(36,875)	-
Gain on disposal of property, plant and equipment	224	-	218	-
Interest expense (Note 24)	(57,771)	-	(62,824)	-
Share of profit of subsidiaries and associates accounted for using equity method	659,991	5	552,056	4
Total non-operating income and expenses	752,690	5	773,388	6
PROFIT BEFORE INCOME TAX	2,083,589	14	2,053,580	16
INCOME TAX EXPENSE (Note 25)	332,865	2	304,171	2
NET PROFIT FOR THE YEAR	1,750,724	12	1,749,409	14

(Continued)

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	$ 8,655	-	$ (18,716)	-
Unrealized gain on investments in equity instruments designated as at fair value through other comprehensive income	144,288	1	-	-
Income tax relating to items that will not be reclassified subsequently to profit or loss	2,659	-	3,182	-
Share of the other comprehensive income (loss) of subsidiaries and associates accounted for using equity method	31,410	-	(57)	-
Items that may be reclassified subsequently to profit or loss:				
Unrealized loss on available-for-sale financial assets	-	-	(114,746)	(1)
Share of the other comprehensive loss of subsidiaries and associates accounted for using equity method	(89,606)	-	(110,137)	(1)
Other comprehensive income (loss) for the year, net of income tax	97,406	1	(240,474)	(2)
TOTAL COMPREHENSIVE PROFIT FOR THE YEAR	$ 1,848,130	13	$ 1,508,935	12
EARNINGS PER SHARE (Note 26)				
Basic	$ 2.01		$ 2.01	
Diluted	$ 2.00		$ 2.00	

Given that the subsidiaries buy and hold the parent company's stocks, which is not regarded as the treasury stock but as the investments, the proforma information was as follows:

	2018		2017	
	Before Income Tax	**After Income Tax**	**Before Income Tax**	**After Income Tax**
Net profit for the year	$1,750,724		$1,749,409	
Earnings per share				
Basic	$ 2.35	$ 1.98	$ 2.32	$ 1.98
Diluted	$ 2.35	$ 1.97	$ 2.32	$ 1.97

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

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Corporation										
		Capital Surplus		Retained Earnings			Other Equity				
	Common Stock	Paid-in Capital in Excess of Par Value	Treasury Stock	Legal Reserve	Special Reserve	Unappropriated Earnings (Accumulated Deficits)	Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) On Available-for-sale Financial Assets	Treasury Stock	Total Equity
BALANCE AT JANUARY 1, 2017	$ 8,857,031	$ 647,908	$ 267,773	$ 2,457,931	$ 1,911,129	$ (481,033)	$ (113,675)	$ -	$ 115,288	$ (187,798)	$ 13,474,554
Legal reserve used to offset deficits	-	-	-	(481,033)	-	481,033	-	-	-	-	-
Cash dividends from capital surplus	-	(177,141)	-	-	-	-	-	-	-	-	(177,141)
Net profit for the year ended December 31, 2017	-	-	-	-	-	1,749,409	-	-	-	-	1,749,409
Other comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	-	(15,591)	(87,274)	-	(137,609)	-	(240,474)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	-	1,733,818	(87,274)	-	(137,609)	-	1,508,935
Change in capital surplus from dividends distributed to subsidiary	-	-	2,751	-	-	-	-	-	-	-	2,751
BALANCE AT DECEMBER 31, 2017	8,857,031	470,767	270,524	1,976,898	1,911,129	1,733,818	(200,949)	-	(22,321)	(187,798)	14,809,099
Effect of retrospective application and retrospective restatement	-	-	-	-	-	474,168	-	(660,624)	22,321	-	(164,135)
Legal reserve	-	-	-	173,382	-	(173,382)	-	-	-	-	-
Cash dividends	-	-	-	-	-	(1,549,980)	-	-	-	-	(1,549,980)
Net profit for the year ended December 31, 2018	-	-	-	-	-	1,750,724	-	-	-	-	1,750,724
Other comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	11,314	(89,606)	175,698	-	-	97,406
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	1,762,038	(89,606)	175,698	-	-	1,848,130
Change in capital surplus from dividends distributed to subsidiary	-	-	24,068	-	-	-	-	-	-	-	24,068
BALANCE AT DECEMBER 31, 2018	$ 8,857,031	$ 470,767	$ 294,592	$ 2,150,280	$ 1,911,129	$ 2,246,662	$ (290,555)	$ (484,926)	$ -	$ (187,798)	$ 14,967,182

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

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax	$ 2,083,589	$ 2,053,580
Adjustments:		
Depreciation expenses	537,348	527,151
Amortization expenses	11,127	10,943
Expected credit loss reversed	(213)	-
Impairment loss reversed on trade receivables	-	(217)
Interest expense	57,771	62,824
Interest income	(4,346)	(2,519)
Loss on financial assets at fair value through profit or loss, net	5,122	-
Dividend income	(43,656)	(42,664)
Share of profit of subsidiaries and associates accounted for using equity method	(659,991)	(552,056)
Gain on disposal of property, plant and equipment	(224)	(218)
Gain on disposal of investments	(19,103)	(171,350)
Write-downs (reversal of write-downs) of inventories	10,525	(5,310)
Unrealized (gain) loss on foreign currency exchange	(18,486)	11,884
Changes in operating assets and liabilities		
Notes receivable	303	(20,656)
Trade receivables	36,939	56,886
Other receivables	4,365	(375)
Inventories	(26,682)	(315,461)
Prepayments	(20,940)	(10,967)
Other current assets	23,300	38,782
Notes payable	-	(1,000)
Trade payables	120,636	(173,078)
Other payables	46,174	69,710
Other current liabilities	(13,881)	(24,468)
Net defined benefit liabilities	(26,100)	(17,805)
Other non-current liabilities	44,624	-
Cash generated from operations	2,148,201	1,493,616
Interest received	4,205	2,214
Interest paid	(56,790)	(64,342)
Income tax paid	(287,139)	(207)
Net cash generated from operating activities	1,808,477	1,431,281
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at fair value through other comprehensive income	(65,066)	-
Proceeds from the capital reduction of financial assets at fair value through other comprehensive income	15,000	-
Proceeds from disposal of available-for-sale financial assets	-	556,102
Purchase of debt investments with no active market	-	(53,143)
Purchase of financial assets at amortized cost	(22,498)	-

(Continued)

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Proceeds from disposal of financial assets at amortized cost	$ 21,676	$ -
Proceeds from sale of debt investments with no active market	-	47,370
Proceeds from the capital reduction of financial assets measured at cost	-	40,000
Purchase of investments accounted for using equity method	(250,000)	(512,074)
Proceeds from disposal of investments accounted for using equity method	180,257	-
Proceeds from disposal of property, plant and equipment	7,695	1,540
Decrease (increase) in other non-current assets	122,017	(426,597)
Increase in construction in progress	(216,882)	(580,450)
Subsidiary dividends received	-	20,187
Dividends received	43,656	42,664
Net cash used in investing activities	(164,145)	(864,401)
CASH FLOWS FROM FINANCING ACTIVITIES		
(Repayments of) proceeds from short-term borrowings	(110,000)	110,000
Proceeds from long-term borrowings	3,149,388	300,052
Repayments of long-term borrowings	(2,599,453)	(1,070,000)
Increase (decrease) in guarantee deposits	2,946	(16,427)
Dividends paid	(1,549,980)	(177,141)
Net cash used in financing activities	(1,107,099)	(853,516)
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES	18,486	(11,884)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	555,719	(298,520)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	56,083	354,603
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 611,802	$ 56,083

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

ORIENTAL UNION CHEMICAL CORPORATION

NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Oriental Union Chemical Corporation (the “Corporation”) was incorporated in December 1975. It manufactures and markets ethylene glycols, ethylene oxide, gas oxygen, gas nitrogen, liquid nitrogen, liquid argon, monoethanolamine, ethylene carbonate, polyethylene glycol, polyoxyethylene lauryl ether and methoxy polyethylene glycols. Its stocks were listed on the Taiwan Stock Exchange (“TWSE”) on October 21, 1987.

The financial statements of the Corporation are presented in the Corporation’s functional currency, New Taiwan dollars.

2. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Corporation’s board of directors on March 19, 2019.

3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the “IFRSs”) endorsed and issued into effect by the ROC Financial Supervisory Commission (FSC)

   Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Corporation’s accounting policies:

   1) IFRS 9 “Financial Instruments” and related amendments

      IFRS 9 supersedes IAS 39 “Financial Instruments: Recognition and Measurement”, with consequential amendments to IFRS 7 “Financial Instruments: Disclosures” and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Refer to Note 4 for information relating to the relevant accounting policies.

      <u>Classification, measurement and impairment of financial assets</u>

      On the basis of the facts and circumstances that existed as of January 1, 2018, the Corporation has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Corporation’s financial assets and financial liabilities as of January 1, 2018.

	Measurement Category		Carrying Amount		
Financial Assets	**IAS 39**	**IFRS 9**	**IAS 39**	**IFRS 9**	**Remark**
Cash and cash equivalents	Loans and receivables	Amortized cost	$ 56,083	$ 56,083	-
Equity securities	Available□for□sale	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	744,100	744,100	(a)
	Financial assets measured at cost	FVTOCI - equity instruments	2,757,802	2,727,824	(a)
Mutual funds	Available□for□sale	Mandatorily at FVTPL	68,711	68,711	(b)
Time deposits with original maturities of more than 3 months	Loans and receivables	Amortized cost	75,976	75,976	(c)
Notes receivable, trade receivables and other receivables	Loans and receivables	Amortized cost	1,090,858	1,090,858	(d)

Financial Assets	**IAS 39 Carrying Amount as of January 1, 2018**	**Reclassifi-cations**	**Remea-surements**	**IFRS 9 Carrying Amount as of January 1, 2018**	**Retained Earnings Effect on January 1, 2018**	**Other Equity Effect on January 1, 2018**	**Remark**
FVTPL	$ -	$ -	$ -	$ -	$ -	$ -	-
Add: Reclassification from available-for-sale (IAS 39) Required reclassification	-	68,711	-	68,711	(11,369)	11,369	(b)
	-	68,711	-	68,711	(11,369)	11,369	
FVTOCI							
Equity instruments	-	-	-	-	-	-	-
Add: Reclassification from financial assets measured at cost (IAS 39)	-	2,757,802	(29,978)	2,727,824	479,632	(509,610)	(a)
Add: Reclassification from available-for-sale (IAS 39)	-	744,100	-	744,100	-	-	(a)
	-	3,501,902	(29,978)	3,471,924	479,632	(509,610)	
Amortized cost							
Add: Reclassification from debt investments with no active market (IAS 39)	-	75,976	-	75,976	-	-	(c)
	-	75,976	-	75,976	-	-	
	$ -	$ 3,646,589	$ (29,978)	$ 3,616,611	$ 468,263	$ (498,241)	

a) The Corporation elected to designate all its investments in equity securities previously classified as available-for-sale under IAS 39 as at FVTOCI under IFRS 9, because these investments are not held for trading. As a result, the related other equity - unrealized gain (loss) on available-for-sale financial assets of $19,896 thousand was reclassified to other equity - unrealized gain (loss) on financial assets at FVTOCI.

   Investments in unlisted shares previously measured at cost under IAS 39 have been designated as at FVTOCI under IFRS 9 and were remeasured at fair value. Consequently, a decrease of $29,978 thousand was recognized in both financial assets at FVTOCI and other equity - unrealized gain (loss) on financial assets at FVTOCI on January 1, 2018.

   The Corporation recognized under IAS 39 impairment loss on certain investments in equity securities previously measured at cost and the loss was accumulated in retained earnings. Since those investments were designated as at FVTOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $479,632 thousand in other equity - unrealized gain (loss) on financial assets at FVTOCI and an increase of $479,632 thousand in retained earnings on January 1, 2018.

b) Mutual funds previously classified as available-for-sale under IAS 39 were classified mandatorily as at FVTPL under IFRS 9, because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The retrospective adjustment resulted in an increase of $11,369 thousand in other equity - unrealized gain (loss) on available-for-sale financial assets and a decrease of $11,369 thousand in retained earnings on January 1, 2018.

c) Debt investments previously classified as debt investments with no active market and measured at amortized cost under IAS 39 were classified as at amortized cost with an assessment of expected credit losses under IFRS 9, because on January 1, 2018, the contractual cash flows were solely payments of principal and interest on the principal outstanding and these investments were held within a business model whose objective is to collect contractual cash flows.

d) Notes receivable, trade receivables and other receivables that were previously classified as loans and receivables under IAS 39 were classified as at amortized cost with an assessment of expected credit losses under IFRS 9.

e) As a result of the retrospective application of IFRS 9 by subsidiaries and associates, there was a decrease in investments accounted for using the equity method of $134,157 thousand, a decrease in other equity - unrealized gain (loss) on financial assets at FVTOCI of $140,062 thousand, and an increase in retained earnings of $5,905 thousand on January 1, 2018.

2) IFRS 15 “Revenue from Contracts with Customers” and related amendments

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers and supersedes IAS 18 “Revenue”, IAS 11 “Construction Contracts” and a number of revenue-related interpretations. Refer to Note 4 for related accounting policies.

Under IFRS 15, the net effect of revenue recognized and consideration received and receivable is recognized as a contract asset or a contract liability. Prior to the application of IFRS 15, receivables and unearned revenue decreased when revenue was recognized for the relevant contract under IAS 18, and reclassified amounts of other current liabilities $39,118 thousand to contract liability.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the “IFRSs”) endorsed by the FSC for application starting from 2019

New, Amended or Revised Standards and Interpretations (the “New IFRSs”)	Effective Date Announced by IASB (Note 1)
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 “Prepayment Features with Negative Compensation”	January 1, 2019 (Note 2)
IFRS 16 “Leases”	January 1, 2019
Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”	January 1, 2019 (Note 3)
Amendments to IAS 28 “Long-term Interests in Associates and Joint Ventures”	January 1, 2019
IFRIC 23 “Uncertainty over Income Tax Treatments”	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Corporation shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

1) IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Definition of a lease

Upon initial application of IFRS 16, the Corporation will elect to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

The Corporation as lessee

Upon initial application of IFRS 16, the Corporation will recognize right-of-use assets, and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases will be recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Corporation will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts, are recognized as expenses on a straight-line basis. Cash flows for operating leases are classified within operating activities and investing activities on the statements of cash flows.

The Corporation anticipates applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities as if IFRS 16 had been applied since the commencement date. The Corporation will apply IAS 36 to all right-of-use assets.

The Corporation expects to apply the following practical expedients:

a) The Corporation will apply a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

b) The Corporation will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

c) The Corporation will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.

d) The Corporation will use hindsight, such as in determining lease terms, to measure lease liabilities.

The Corporation as lessor

The Corporation will not make any adjustments for leases in which it is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

Anticipated impact on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	Adjustments Arising from Initial Application	Adjusted Carrying Amount as of January 1, 2019
Right-of-use assets	$ -	$ 32,605	$ 32,605
Total effect on assets	$ -	$ 32,605	$ 32,605
Lease liabilities - current	$ -	$ 9,827	$ 9,827
Lease liabilities - non-current	-	22,778	22,778
Total effect on liabilities	$ -	$ 32,605	$ 32,605
Total effect on equity		$ -	

Except for the above impacts, as of the date the financial statements were authorized for issue, the Corporation continues assessed other possible impacts that the application of the aforementioned amendments and the related amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers would not have impacts on the Corporation's financial position and financial performance.

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Corporation shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Corporation shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the financial statements were authorized for issue, the Corporation is continuously assessing the possible impact that the application of other standards and interpretations will have on the Corporation's financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

The financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

b. Basis of preparation

The financial statements have been prepared on the historical cost basis except for financial instruments measured at fair value, and net defined benefit liabilities measured at the present value of the defined benefit obligation less the fair value of plan assets.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

3) Level 3 inputs are unobservable inputs for an asset or liability.

When preparing these parent Corporation only financial statements, the Corporation used the equity method to account for its investments in subsidiaries and associates. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent Corporation only financial statements to be the same with the amounts attributable to the owners of the Corporation in its consolidated financial statements, adjustments arising from the differences in accounting treatments between the parent Corporation only basis and the consolidated basis were made to investments accounted for using the equity method, the share of profit or loss of subsidiaries and associates, the share of other comprehensive income of subsidiaries and associates and the related equity items, as appropriate, in these parent Corporation only financial statements

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the financial statements are authorized for issue; and

3) Liabilities for which the Corporation does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

Assets and liabilities that are not classified as current are classified as non-current.

d. Foreign currencies

In preparing the Corporation's financial statements, transactions in currencies other than the Corporation's functional currency (i.e. foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income; in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

For the purpose of presenting financial statements, the functional currencies of the Corporation and the group entities (including subsidiaries and associates in other countries that use currencies which are different from the currency of the Corporation) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

e. Inventories

Inventories consist of raw materials, work in progress and finished goods and are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. The net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at the weighted-average cost on the balance sheet date.

f. Investments in subsidiaries and associates

1) Investments in subsidiaries

The Corporation uses the equity method to account for its investments in subsidiaries.

A subsidiary is an entity controlled by the Corporation.

Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Corporation's share of the profit or loss and other comprehensive income of the subsidiary. The Corporation also recognizes the changes in the Corporation's share of equity of subsidiaries.

Changes in the Corporation's ownership interest in a subsidiary that do not result in the Corporation losing control of the subsidiary are equity transactions. The Corporation recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

When the Corporation's share of losses of a subsidiary exceeds its interest in that subsidiary, the Corporation continues recognizing its share of further losses.

Any excess of the cost of acquisition over the Corporation's share of the net fair value of the identifiable assets and liabilities of a subsidiary at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Corporation's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

The Corporation assesses its investment for any impairment by comparing the carrying amount with the estimated recoverable amount as assessed based on the investee's financial statements as a whole. Impairment loss is recognized when the carrying amount exceeds the recoverable amount. If the recoverable amount of the investment subsequently increases, the Corporation recognizes a reversal of the impairment loss; the adjusted post-reversal carrying amount should not exceed the carrying amount that would have been recognized (net of amortization) had no impairment loss been recognized in prior years. An impairment loss recognized on goodwill cannot be reversed in a subsequent period.

When the Corporation loses control of a subsidiary, it recognizes the investment retained in the former subsidiary at its fair value at the date when control is lost. The difference between the fair value of the retained investment plus any consideration received and the carrying amount of the previous investment at the date when control is lost is recognized as a gain or loss in profit or loss. Besides this, the Corporation accounts for all amounts previously recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Corporation had directly disposed of the related assets or liabilities.

Profits or losses resulting from downstream transactions are eliminated in full only in the parent Corporation's financial statements. Profits and losses resulting from upstream transactions and transactions between subsidiaries are recognized only in the parent Corporation's financial statements only to the extent of interests in the subsidiaries that are not related to the Corporation.

2) Investments in associates

An associate is an entity over which the Corporation has significant influence and which is not a subsidiary. The Corporation uses the equity method to account for its investments in associates.

Under the equity method, investments in an associate is initially recognized at cost and adjusted thereafter to recognize the Corporation's share of the profit or loss and other comprehensive income of the associate. The Corporation also recognizes the changes in the Corporation's share of the equity of associates.

When the Corporation subscribes for additional new shares of an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Corporation's proportionate interest in the associate. The Corporation records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in capital surplus from investments in associates accounted for using the equity method. If the Corporation's ownership interest is reduced due to its additional subscription of the new shares of the associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified to profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for using the equity method is insufficient, the shortage is debited to retained earnings.

When the Corporation’s share of losses of an associate equals or exceeds its interest in that associate, the Corporation discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Corporation has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Corporation discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment’s fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Corporation accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required had that associates directly disposed of the related assets or liabilities.

When a group entity transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Corporation’ financial statements only to the extent that interests in the associate is not related to the Corporation.

g. Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment loss.

Property, plant and equipment in the course of construction are measured at cost less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such assets are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for their intended use.

Depreciation of property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in the estimates accounted for on a prospective basis.

On derecognition of an item of property, plant and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

h. Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are initially measured at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss.

i. Intangible assets

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in the estimates accounted for on a prospective basis.

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

j. Impairment of tangible and intangible assets

At the end of each reporting period, the Corporation reviews the carrying amounts of its tangible and intangible assets, to determine whether there is any indication that those assets have suffered any impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Corporation estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the corresponding asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

k. Financial instruments

Financial assets and financial liabilities are recognized when the Corporation becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities (other than financial assets and financial liabilities at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss.

1) Financial assets

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

a) Measurement categories

<u>2018</u>

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost and investments in equity instruments at FVTOCI.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 29.

ii. Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, trade receivables and other receivables, are measured at amortized cost, which equals the gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii) Financial assets that are not credit-impaired on purchase or origination but have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

Cash equivalents include time deposits and repurchase agreements collateralized by bonds with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in equity instruments at FVTOCI

On initial recognition, the Corporation may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Corporation's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

<u>2017</u>

Financial assets are classified into the following categories: Available-for-sale financial assets and loans and receivables.

i. Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amounts of available-for-sale monetary financial assets (relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments) are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when such investments are disposed of or are determined to be impaired.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Corporation's right to receive the dividends is established.

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity investments are measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between the carrying amount and the fair value of such financial assets is recognized in other comprehensive income. Any impairment losses are recognized in profit and loss.

ii. Loans and receivables

Loans and receivables (including trade receivables, notes receivables, cash and cash equivalents, other receivables and debt investments with no active market) are measured using the effective interest method at amortized cost less any impairment, except for short-term receivables when the effect of discounting is immaterial.

Cash equivalents include time deposits and repurchase agreements collateralized by bonds with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

b) Impairment of financial assets

2018

The Corporation recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables).

The Corporation always recognizes lifetime expected credit losses (i.e. ECLs) for trade receivables. For all other financial instruments, the Corporation recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on a financial instrument has not increased significantly since initial recognition, the Corporation measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Corporation recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

2017

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence, as a result of one or more events that occurred after the initial recognition of such financial assets, that the estimated future cash flows of the investment have been affected.

Financial assets at amortized cost, such as notes receivable and trade receivables, are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Corporation's past experience with collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with defaults on receivables.

For a financial asset at amortized cost, the amount of the impairment loss recognized is the difference between such an asset's carrying amount and the present value of its estimated future cash flows, discounted at the financial asset's original effective interest rate.

For a financial asset at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment (at the date on which the impairment is reversed) does not exceed what the amortized cost would have been had the impairment not been recognized.

For available-for-sale equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss is not reversed through profit or loss. Any increase in fair value subsequent to impairment is recognized in other comprehensive income. In respect of available-for-sale debt securities, impairment loss is subsequently reversed through profit or loss if an increase in the fair value of such an investment can be objectively related to an event occurring after the recognition of the impairment loss.

For a financial asset measured at cost, the amount of the impairment loss is measured as the difference between such an asset's carrying amount and the present value of its estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of a financial asset is reduced by the impairment loss directly for all financial assets, with the exception of notes receivables and trade receivables, where the carrying amount is reduced through the use of an allowance account. When notes receivable and trade receivables are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible notes receivable and trade receivables that are written off against the allowance account.

c) Derecognition of financial assets

The Corporation derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of a financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

l. Revenue recognition

2018

The Corporation identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

For contracts where the period between the date on which the Corporation transfers a promised good or service to a customer and the date on which the customer pays for that good or service is one year or less, the Corporation does not adjust the promised amount of consideration for the effects of a significant financing component.

When another party is involved in providing goods or services to a customer, the Corporation recognizes revenue in the gross amount if it controls each specified good or service before that good or service is transferred to the customer (the Corporation is a principal); otherwise, the Corporation recognizes revenue in the net amount (the Corporation is an agent).

A specified good or service is a distinct good or service, the Corporation determines whether it is a principal or an agent for each specified good or service.

The Corporation is a principal if it meets any one of the following conditions:

1) The Corporation obtains control of a good or service from the other party before the Corporation transfers the good or service to a customer.

2) The Corporation has a right to a service to be performed by the other party, which gives the entity the ability to direct that party to provide the service to the customer on the entity's behalf.

3) The Corporation obtains control of a good or service from the other party that it then combines with other goods or services in providing the specified good or service to the customer.

Indicators that are used to determine whether the Corporation controls the specified good or service before it is transferred to the customer include, but are not limited to, the following:

1) The Corporation is primarily responsible for fulfilling the promise to provide the specified good or service.

2) The Corporation has inventory risk before and after the specified good or service has been transferred to a customer or after transfer of control to the customer.

3) The Corporation has discretion in establishing the price for the specified good or service.

2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Sales returns are recognized at the time of sale based on the seller's reliable estimate of future returns and based on past experience and other relevant factors.

1) Sale of goods

   Revenue from the sale of goods is recognized when all the following conditions are satisfied:

   a) The Corporation has transferred to the buyer the significant risks and rewards of ownership of the goods;

b) The Corporation retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

c) The amount of revenue can be measured reliably;

d) It is probable that the economic benefits associated with the transaction will flow to the Corporation; and

e) The costs incurred or to be incurred in respect of the transaction can be measured reliably.

2) Dividend and interest income

Dividend income from investments is recognized when the stockholder's right to receive payment has been established and provided that it is probable that the economic benefits will flow to the Corporation and the amount of income can be measured reliably.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Corporation and the amount of income can be measured reliably. Interest income is accrued on a time basis by reference to the principal outstanding and at the applicable effective interest rate.

m. Leasing

Rental income or expense from operating leases is recognized on a straight-line basis over the term of the relevant lease.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than that which is stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related services.

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost, and net interest on the net defined benefit liabilities (assets) are recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses, and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Corporation's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

p. Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

According to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Corporation is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liabilities are settled or the assets are realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Corporation expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity; in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Corporation's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Impairment Assessment of Property, Plant and Equipment

In the process of assessing impairment, the Corporation relies on subjective judgment to determine whether the specific group of assets have indications of impairment, according to the usage of the assets and the business' characteristics. Alteration of estimates from any change in economic conditions or business strategy may lead to significant future impairment loss.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2018	**2017**
Cash on hand	$ 110	$ 116
Checking accounts and demand deposits	501,781	23,231
Cash equivalents		
Time deposits with original maturities of less than 3 months	-	32,736
Repurchase agreements collateralized by bonds	109,911	-
	$ 611,802	$ 56,083

The market rate intervals of cash in the bank at the end of the reporting period were as follows:

	December 31	
	2018	**2017**
Bank balance	0.01%-0.10%	0.01%-1.28%
Repurchase agreements collateralized by bonds	0.45%	-

7. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31, 2018
Financial assets mandatorily classified as at FVTPL	
Domestic mutual funds	$ 63,589

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - 2018

Investments in equity instruments at FVTOCI

	December 31, 2018
Non-current	
Domestic investments	
Listed shares	$ 852,579
Unlisted shares	2,813,699
	$ 3,666,278

These investments in equity instruments are not held for trading. Instead, they are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Corporation's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale under IAS 39. Refer to Note 3, Note 4, Note 10 and Note 11 for information relating to their reclassification and comparative information for 2017.

9. FINANCIAL ASSETS AT AMORTIZED COST - 2018

	December 31, 2018
Non-current	
Domestic investments	
Pledge certificates of deposits	$ 76,968

In December 31, 2018, the pledge certificates of deposits with an annual interest rate of 0.6%-1.4%. The Corporation assesses there has not been a significant expected credit losses and an increase in credit risk since the original recognize. The deposits were classified as debt investments with no active market under IAS 39. Refer to Notes 3, 4 and 12 for information relating to their reclassification and comparative information for 2017.

Refer to Note 31 for information relating to financial assets at amortized cost as security.

10. AVAILABLE-FOR-SALE FINANCIAL ASSETS - 2017

	December 31, 2017
Domestic investments	
Listed shares	$ 744,100
Mutual funds	68,711
	$ 812,811
Current	$ 68,711
Non-current	744,100
	$ 812,811

11. FINANCIAL ASSETS MEASURED AT COST - 2017

	December 31, 2017
Domestic unlisted common stock	$ 2,757,802
Classified according to financial asset measurement categories	
Available-for-sale financial assets	$ 2,757,802

Management believed that the above unlisted equity investments held by the Corporation, whose fair value cannot be reliably measured, because the range of reasonable fair value estimates was so significant. Therefore, they were measured at cost less impairment at the end of reporting period.

12. DEBT INVESTMENTS WITH NO ACTIVE MARKET - 2017

	December 31, 2017
Pledge certificates of deposits	$ 75,976

Refer to Note 31 for information relating to debt investments with no active market pledged as security.

13. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31	
	2018	2017
Notes receivable		
Notes receivable	$ 111,210	$ 111,513
Less: Allowance for impairment loss	(668)	(669)
	$ 110,542	$ 110,844
Trade receivables		
Trade receivables	$ 904,531	$ 941,470
Less: Allowance for impairment loss	(5,437)	(5,649)
	$ 899,094	$ 935,821
Other receivables		
Tax refund receivables	$ 32,048	$ 34,429
Interest receivables	948	807
Others	4,403	8,957
	$ 37,399	$ 44,193

In 2018

The Corporation applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all notes receivable and trade receivables. The expected credit losses on notes receivable and trade receivables are estimated using a past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of economic conditions at the reporting date.

The following table details the loss allowance of notes receivable and trade receivables.

December 31, 2018

	0 to 60 Days	61 to 90 Days	91 to 120 Days	121 to 150 Days	Total
Carrying amount	$ 996,254	$ 14,823	$ 3,704	$ 960	$ 1,015,741
Loss allowance (Lifetime ECL)	(668)	(773)	(3,704)	(960)	(6,105)
Amortized cost	$ 995,586	$ 14,050	$ -	$ -	$ 1,009,636

The above aging schedule was based on the number of days past due from the invoice date.

The movements of the loss allowance of notes receivable and trade receivables were as follows:

	2018
Balance at January 1, 2017 per IAS 39	$ 6,318
Adjustment on initial application of IFRS 9	-
Balance at January 1, 2017 per IFRS 9	6,318
Less: Net remeasurement of loss allowance	(213)
Balance at December 31, 2018	$ 6,105

In 2017

For some trade receivables balances that were past due at the end of the reporting period, the Corporation did not recognize an allowance for impairment loss because there was no significant change in credit quality and the amounts were still considered recoverable. The Corporation did not hold any collateral or other credit enhancements for these balances.

The aging of receivables was as follows:

	December 31, 2017
Up to 60 days	$ 920,941
61-90 days	13,399
91-120 days	6,856
121-150 days	274
	$ 941,470

The above aging schedule was based on the number of days past due from the invoice date.

The aging of receivables that were past due but not impaired was as follows:

	December 31, 2017
Up to 60 days	$ 20,255
61-90 days	274
	$ 20,529

The above aging schedule was based on the number of days past due from the invoice date.

The movements of allowance for doubtful notes receivable and trade receivables were as follows:

	Collectively Assessed for Impairment
Balance at January 1, 2017	$ 6,535
Add: Impairment losses reversed	(217)
Balance at December 31, 2017	$ 6,318

14. INVENTORIES

	December 31	
	2018	2017
Finished goods	$ 532,077	$ 546,698
Work in progress	27,027	19,639
Raw materials	273,494	250,104
	$ 832,598	$ 816,441

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2018 and 2017 was $12,567,843 thousand and $10,850,815 thousand, respectively. The cost of goods sold for the years ended December 31, 2018 and 2017 included inventory write-downs of $10,525 thousand and reversal of inventory write-downs of $5,310 thousand. The reversals of previous write-downs resulted from increased selling prices in certain markets.

15. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31	
	2018	2017
Investments in subsidiaries	$ 7,711,476	$ 6,998,118
Investments in associates	-	161,154
	$ 7,711,476	$ 7,159,272

a. Investments in subsidiaries

	December 31	
	2018	**2017**
Pacific Petrochemical (Holding) Ltd. (PPL)	$ 6,177,584	$ 5,401,845
Tong Fu Investment Co., Ltd. (TFIC)	1,155,105	978,699
Oucc (Bermuda) Holding Ltd. (OUCC Bermuda)	378,787	617,574
	$ 7,711,476	$ 6,998,118

Proportion of ownership and voting rights held by the Corporation were as follows:

	December 31	
	2018	**2017**
PPL	100%	100%
TFIC	100%	100%
OUCC (Bermuda)	100%	100%

Under the approval of the ROC's Investment Commission under the Ministry of Economic Affairs on September 21, 2017, the Corporation subscribed for new stock issued by PPL of US$17,000 thousand. For the year ended December 31, 2018, the Corporation has invested US$192,972 thousand, representing 100% interest, in PPL. Additionally, the Corporation has indirectly invested US$92,886 thousand, representing 39% interest, in Oriental Petrochemical (Shanghai) Corp(OPSC) through PPL.

The Corporation set up OUCC (Bermuda) and indirectly invested in Oriental Petrochemical (Yangzhou) Corporation through OUCC (Bermuda). For the year ended December 31, 2018, the Corporation has invested US$70,000 thousand, representing 100% interest, in OUCC (Bermuda).

Investments of subsidiaries were accounted for using the equity method; the share of profit or loss and other comprehensive income of those investments were calculated based on subsidiaries' financial statements which have been audited.

Refer to Note 31 for information relating to investment of TFIC pledged as loans security.

b. Investments in associates

	December 31	
	2018	**2017**
Associates that are not individually material		
Oriental Resource Development Ltd. ("ORD")	$ -	$ 151,781
Kuokuang Petrochemical Technology Corporation, Ltd. ("KPTC")	-	9,373
	$ -	$ 161,154

In March 2018, for the need of future operational strategy, the Corporation sold all of its interest in ORD for proceeds of $170,747 thousand and resulted in the recognition of a gain in profit of $18,966 thousand.

Liquidation processes of KPTC completed in April 2018 and the Corporation received proceeds from the capital reduction of $9,510 thousand, which resulted in the recognition of a gain in profit of $137 thousand.

Aggregate information of associates that are not individually material

	For the Year Ended December 31	
	2018	2017
The Corporation's share of:		
Net profit	$ 1	$ 13,128
Other comprehensive loss	-	(57)
Total comprehensive income for the year	$ 1	$ 13,071

The investments accounted for using equity method and the share of profit or loss and other comprehensive income of those investments for the year ended December 31, 2017 were based on the associates' financial statements which have been audited for the same year.

16. PROPERTY, PLANT AND EQUIPMENT AND CONSTRUCTION IN PROGRESS

	Land	Land Improvements	Buildings	Machinery and Equipment	Other Equipment	Construction in Progress and Equipment to Be Inspected	Total
Cost							
Balance at January 1, 2017	$ 1,591,461	$ 320,689	$ 599,234	$ 14,691,292	$ 555,540	$ 703,969	$ 18,462,185
Additions	-	-	-	-	-	424,465	424,465
Disposals	-	-	-	(5,875)	(5,862)	-	(11,737)
Reclassification	-	-	3,615	273,472	41,596	(320,670)	(1,987)
Balance at December 31, 2017	$ 1,591,461	$ 320,689	$ 602,849	$ 14,958,889	$ 591,274	$ 807,764	$ 18,872,926
Accumulated depreciation							
Balance at January 1, 2017	$ -	$ 304,693	$ 358,962	$ 10,364,835	$ 466,106	$ -	$ 11,494,596
Disposals	-	-	-	(4,804)	(5,611)	-	(10,415)
Depreciation expenses	-	3,662	22,928	474,187	26,291	-	527,068
Balance at December 31, 2017	$ -	$ 308,355	$ 381,890	$ 10,834,218	$ 486,786	$ -	$ 12,011,249
Carry amounts at December 31, 2017	$ 1,591,461	$ 12,334	$ 220,959	$ 4,124,671	$ 104,488	$ 807,764	$ 6,861,677
Cost							
Balance at January 1, 2018	$ 1,591,461	$ 320,689	$ 602,849	$ 14,958,889	$ 591,274	$ 807,764	$ 18,872,926
Additions	-	-	-	-	-	248,133	248,133
Disposals	-	-	-	(159,330)	(9,950)	-	(169,280)
Reclassification	-	-	3,726	180,641	63,421	(251,329)	(3,541)
Balance at December 31, 2018	$ 1,591,461	$ 320,689	$ 606,575	$ 14,980,200	$ 644,745	$ 804,568	$ 18,948,238
Accumulated depreciation							
Balance at January 1, 2018	$ -	$ 308,355	$ 381,890	$ 10,834,218	$ 486,786	$ -	$ 12,011,249
Disposals	-	-	-	(151,859)	(9,950)	-	(161,809)
Depreciation expenses	-	1,968	23,195	483,363	28,740	-	537,266
Balance at December 31, 2018	$ -	$ 310,323	$ 405,085	$ 11,165,722	$ 505,576	$ -	$ 12,386,706
Carry amounts at December 31, 2018	$ 1,591,461	$ 10,366	$ 201,490	$ 3,814,478	$ 139,169	$ 804,568	$ 6,561,532

The above items of property, plant and equipment were depreciated on a straight-line basis over the estimated useful lives as follows:

Land improvements	7-25 years
Buildings	6-60 years
Machinery and equipment	2-20 years
Other equipment	3-20 years

17. INVESTMENT PROPERTIES

Cost

Balance at December 31, 2018 and 2017	$ 2,023,323

	Accumulated Depreciation	Accumulated Impairment	Total
Accumulated depreciation and impairment			
Balance at January 1, 2017	$ 24,991	$ 6,513	$ 31,504
Depreciation expenses	83	-	83
Balance at December 31, 2017	$ 25,074	$ 6,513	$ 31,587
Balance at January 1, 2018	$ 25,074	$ 6,513	$ 31,587
Depreciation expenses	82	-	82
Balance at December 31, 2018	$ 25,156	$ 6,513	$ 31,669

The investment properties of land improvements held by the Corporation which are depreciated over their estimated useful lives of 16 years using the straight-line method.

The fair value of investment properties was $3,218,796 thousand and $3,134,582 thousand as of December 31, 2018 and 2017, respectively. The fair value was arrived at on the basis of a valuation carried out at that date by independent qualified professional values not connected to the Corporation.

18. OTHER ASSETS

	December 31	
	2018	2017
Other assets		
Silver and catalysts	$ 773,095	$ 918,205
Materials	190,861	167,212
Input tax	16,042	42,819
Others	60,936	65,815
	$ 1,040,934	$ 1,194,051
Current	$ 170,556	$ 193,856
Non-current	870,378	1,000,195
	$ 1,040,934	$ 1,194,051

Other assets include silver and catalysts used in the production, parts and components for the maintenance of equipment and input tax.

19. BORROWINGS

a. Short-term borrowings

	December 31	
	2018	2017
Unsecured borrowings		
Bank loans	$ -	$ 110,000
Interest rate	-	1.16%

b. Long-term borrowings

	December 31	
	2018	2017
Secured borrowings (Note 31)		
Long-term commercial paper payables	$ -	$ 129,872
Unsecured borrowings		
Line of credit borrowings	4,880,000	4,650,000
Long-term commercial paper payables	1,749,388	1,299,581
	6,629,388	5,949,581
Long-term borrowing	$ 6,629,388	$ 6,079,453
Interest rate	0.57%-1.17%	0.44%-1.18%
Maturity date	November 2020	October 2019

20. OTHER PAYABLES

	December 31	
	2018	2017
Payables for purchase of equipment	$ 74,689	$ 43,439
Payables for salaries	71,271	69,815
Payables for employee's compensation and remuneration of directors and supervisors	49,039	47,938
Freight payables	42,357	37,448
Payables for dividends	36,044	33,465
Payables for annual leave	18,798	23,759
Others	137,636	95,564
	$ 429,834	$ 351,428

21. OTHER LIABILITIES

	December 31 2018	December 31 2017
Contract liabilities	$ 72,693	$ -
Receipts in advance	-	39,118
Provisions for repairs and maintenance	44,624	51,046
Others	9,018	5,428
	$ 126,335	$ 95,592
Current	$ 81,711	$ 95,592
Non-current	44,624	-
	$ 126,335	$ 95,592

Contract liabilities were receipts in advance.

22. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Corporation adopted a pension plan under the Labor Pension Act (the "LPA"), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

b. Defined benefit plan

The defined benefit plan adopted by the Corporation in accordance with the Labor Standards Law is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Corporation contribute amounts equal to 10% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Corporation assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Corporation is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Corporation has no right to influence the investment policy and strategy.

The amounts included in the balance sheets in respect of the Corporation's defined benefit plans were as follows:

	December 31 2018	December 31 2017
Present value of defined benefit obligation	$ 385,505	$ 406,208
Fair value of plan assets	(135,345)	(121,293)
Net defined benefit liabilities	$ 250,160	$ 284,915

Movements in net defined benefit liabilities were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liabilities
Balance at January 1, 2017	$ 406,618	$ (122,614)	$ 284,004
Service cost			
Current service cost	11,699	-	11,699
Net interest expense (income)	5,083	(1,630)	3,453
Recognized in profit or loss	16,782	(1,630)	15,152
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	327	327
Actuarial loss - changes in demographic assumptions	9,093	-	9,093
Actuarial loss - experience adjustments	9,296	-	9,296
Recognized in other comprehensive income	18,389	327	18,716
Contributions from the employer	-	(32,957)	(32,957)
Benefits paid	(35,581)	35,581	-
Balance at December 31, 2017	$ 406,208	$ (121,293)	$ 284,915
Balance at January 1, 2018	$ 406,208	$ (121,293)	$ 284,915
Service cost			
Current service cost	11,859	-	11,859
Net interest expense (income)	5,078	(1,606)	3,472
Recognized in profit or loss	16,937	(1,606)	15,331
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(3,410)	(3,410)
Actuarial loss - changes in demographic assumptions	4,417	-	4,417
Actuarial loss - changes in financial assumptions	4,801	-	4,801
Actuarial gain - experience adjustments	(14,463)	-	(14,463)
Recognized in other comprehensive income	(5,245)	(3,410)	(8,655)
Contributions from the employer	-	(41,431)	(41,431)
Benefits paid	(32,395)	32,395	-
Balance at December 31, 2018	$ 385,505	$ (135,345)	$ 250,160

Through the defined benefit plans under the Labor Standards Law, the Corporation is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2018	**2017**
Discount rate(s)	1.13%	1.25%
Expected rate(s) of long - term salary increase	2.00%	2.00%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	December 31	
	2018	**2017**
Discount rate(s)		
0.25% increase	$ (9,600)	$ (10,127)
0.25% decrease	$ 9,984	$ 10,542
Expected rate(s) of long - term salary increase		
0.25% increase	$ 9,721	$ 10,279
0.25% decrease	$ (9,397)	$ (9,926)

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 13,887	$ 14,363
The average duration of the defined benefit obligation	11.2 years	11.3 years

23. EQUITY

a. Common stock

	December 31	
	2018	**2017**
Number of stocks authorized (in thousands)	1,000,000	1,000,000
Stocks authorized	$ 10,000,000	$ 10,000,000
Number of stocks issued and fully paid (in thousands)	885,703	885,703
Stocks issued	$ 8,857,031	$ 8,857,031

A total of 10,000 thousand stocks of the Corporation's stock were authorized to be reserved for the issuance of employee stock options.

b. Capital surplus

	December 31	
	2018	2017
May be used to offset a deficit, distributed as cash dividends, or transferred to capital stock (Note)		
Issuance of common stock	$ 470,767	$ 470,767
Only be used to offset a deficit		
Treasury stock transactions	294,592	270,524
	$ 765,359	$ 741,291

Note: Such capital surplus may be used to offset a deficit; in addition, when the Corporation has no deficit, such capital surplus may be distributed as cash dividends or transferred to capital stock (limited to a certain percentage of the Corporation's capital surplus and once a year)

c. Retained earnings and dividends policy

Under the dividend policy as set forth in the Corporation's Articles of Incorporation ("Articles"), where the Corporation made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as a legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Corporation's board of directors as the basis for proposing a distribution plan, which should be resolved in the stockholders' meeting for the distribution of dividends and bonuses to stockholders. The settlement of the dividend and bonus distribution due to a capital increase in the fiscal year should be resolved in the stockholders' meeting. For the policies on the distribution of employees' compensation and remuneration of directors and supervisors before and after amendment, refer to Note 24 (c) "Employee benefits expense".

In accordance with the Articles, the dividend distribution takes into consideration the characteristics of industry that the Corporation operates in and the forthcoming capital requirement and tax policy that is influenced by the Corporation's products or services, and it should be settled for the purpose of maintaining stable dividends. The amount of cash dividends should not be less than 10% of the total dividends and bonuses to be distributed to stockholders in the fiscal year, unless the distribution is to fulfill capital requirements such as improving the financial structure effectively, coping with reinvestment, expanding capacity or other significant capital expenditure.

An appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Corporation's paid-in capital. The legal reserve may be used to offset deficits. If the Corporation has no deficit and the legal reserve has exceeded 25% of the Corporation's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs", shall be appropriated to or reversed from a special reserve by the Corporation. Any appropriated special reserve may be reversed to the extent that the net debit balance reverses, and thereafter it is distributed.

The appropriation of earnings for 2017 and the deficit compensations for 2016 were approved in the stockholders' meetings on June 8, 2018 and June 8, 2017, respectively. Furthermore, above stockholders' meetings resolved to offset deficit by legal reserve of $481,033 thousand and distribute cash dividends from its capital surplus of $177,141 thousand, respectively.

The appropriation of earnings for 2017 were approved in the stockholder’s meetings on June 8, 2018. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 173,382	$ -
Cash dividends	1,549,980	1.75

The appropriation of earnings for 2018 had been proposed by the Corporation’s board of directors on March 19, 2019. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT$)
Legal reserve	$ 175,072	$ -
Cash dividends	1,549,980	1.75

The appropriation of earnings for 2018 is subject to the resolution of the stockholders’ meeting to be held on June 11, 2019.

d. Special reserves

On the first-time adoption of IFRSs, the Corporation appropriated to special reserve, the amounts that were the same as the unrealized revaluation increment, the fair value of investment properties at the date of transition as the deemed cost and the cumulative translation differences transferred to retained earnings, which were $985,545 thousand, $787,176 thousand and $138,408 thousand, respectively.

e. Treasury stock

The Corporation’s stocks held by its subsidiaries at the end of the reporting periods were as follows:

Name of Subsidiary	Number of Stocks Held (In Thousands of Stocks)	Carrying Amount	Market Price
December 31, 2018			
TFIC	13,754	$ 354,842	$ 354,842
December 31, 2017			
TFIC	13,754	$ 435,300	$ 435,300

Under the Securities and Exchange Act, the Corporation shall neither pledge treasury stocks nor exercise stockholders’ rights on these stocks, such as rights to dividends and to vote. The subsidiaries holding treasury stock, however, retain stockholders’ rights, except the rights to participate in any stock issuance for cash and to vote.

24. NET PROFIT

a. Interest expense

	For the Year Ended December 31	
	2018	2017
Interest on bank loans	$ 57,740	$ 62,795
Other interest expense	31	29
	$ 57,771	$ 62,824

Information about capitalized interest was as follows:

	For the Year Ended December 31	
	2018	2017
Capitalized interest	$ 993	$ 2,566
Capitalization rate	0.41%-1.18%	0.40%-1.36%

b. Depreciation and amortization

	For the Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 537,266	$ 527,068
Intangible assets (included other assets)	11,127	10,943
Investment properties	82	83
	$ 548,475	$ 538,094
An analysis of depreciation by function		
Operating costs	$ 495,554	$ 496,557
Operating expenses	41,712	30,511
Non-operating expenses and losses	82	83
	$ 537,348	$ 527,151
An analysis of amortization by function		
Operating costs	$ 8,651	$ 8,570
Operating expenses	2,476	2,373
	$ 11,127	$ 10,943

c. Employee benefits expense

	For the Year Ended December 31	
	2018	2017
Salary expense	$ 419,431	$ 394,626
Insurance expense	32,714	29,259
Post-employment benefits (Note 22)		
Defined contribution plans	9,664	8,538
Defined benefit plans	15,331	15,152
Other employee benefits	65,630	56,579
Total employee benefits expense	$ 542,770	$ 504,154
An analysis of employee benefits expense by function		
Operating costs	$ 317,468	$ 315,435
Operating expenses	225,302	188,719
	$ 542,770	$ 504,154

For the years ended December 31, 2018 and 2017, the average numbers of the Corporation's employees were 382 and 373, respectively, and the numbers of directors who were not employees were both 8. The directors not employees whose benefits basis of calculation was equal to employees'.

In compliance with the Articles, the Corporation accrued employees' compensation and remuneration of directors and supervisors at the rates from 1% to 2% and no higher than 1%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. However, if the Corporation has accumulated any deficit, the profit should be set aside for offsetting the losses. The accrued employees' compensation and remuneration of directors and supervisors was $47,960 thousand and $47,938 thousand for the year ended December 31, 2018 and 2017.

If there is a change in the amounts after the annual financial statements were authorized for issue, the differences are recorded as a change in the accounting estimate.

Information on the employees' compensation and remuneration of directors and supervisors resolved by the Corporation's board of directors in 2019 and 2018 are available on the Market Observation Post System website of the TWSE.

25. INCOME TAXES

a. Major components of income tax recognized in profit or loss are as follows:

	For the Year Ended December 31	
	2018	2017
Current tax		
In respect of the current year	$ 190,372	$ 200,557
Income tax on unappropriated earnings	1,045	-
	191,417	200,557
Deferred tax		
In respect of the current year	169,082	103,614
Effect of tax rate changes	(27,634)	-
	141,448	103,614
Income tax expense recognized in profit or loss	$ 332,865	$ 304,171

A reconciliation of accounting profit and income tax expense is as follows:

	For the Year Ended December 31	
	2018	2017
Profit before tax	$ 2,083,589	$ 2,053,580
Income tax expense calculated at the statutory rate	$ 416,718	$ 349,109
Nondeductible expenses in determining taxable income	68	51
Tax-exempt income	(36,917)	(46,786)
Income tax on unappropriated earnings	1,045	-
Unrecognized deductible temporary differences	(20,415)	1,797
Effect of tax rate changes	(27,634)	-
Income tax expense recognized in profit or loss	$ 332,865	$ 304,711

In 2017, the applicable corporate income tax rate used by the Corporation in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%.

As the status of the 2019 appropriation of earnings is uncertain, the potential income tax consequences of the 2018 unappropriated earnings are not reliably determinable.

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2018	2017
Deferred tax		
Effect of tax rate changes	$ 4,389	$ -
In respect of the current year		
Remeasurement on defined benefit plans	(1,730)	3,182
Total income tax recognized in other comprehensive income	$ 2,659	$ 3,182

c. Current tax liabilities

	December 31	
	2018	2017
Income tax payable	$ 142,016	$ 240,138

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Recognition of loss on foreign investments using equity method	$ 363,454	$ (66,843)	$ -	$ 296,611
Defined benefit obligation	52,788	(5,415)	2,659	50,032
Others	1,665	(1,665)	-	-
	$ 417,907	$ (73,923)	$ 2,659	$ 346,643
Deferred tax liabilities				
Land revaluation increment tax	$ 341,231	$ -	$ -	$ 341,231
Property, plant and equipment	213,168	66,335	-	279,503
Investment properties	14,814	-	-	14,814
Others	35,107	1,190	(28,348)	7,949
	$ 604,320	$ 67,525	$ (28,348)	$ 643,497

For the year ended December 31, 2017

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Recognition of loss on foreign investments using equity method	$ 447,709	$ (84,255)	$ -	$ 363,454
Defined benefit obligation	49,606	-	3,182	52,788
Others	1,774	(109)	-	1,665
	$ 499,089	$ (84,364)	$ 3,182	$ 417,907

(Continued)

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax liabilities				
Land revaluation increment tax	$ 341,231	$ -	$ -	$ 341,231
Property, plant and equipment	193,918	19,250	-	213,168
Investment properties	14,814	-	-	14,814
Others	35,107	-	-	35,107
	$ 585,070	$ 19,250	$ -	$ 604,320

(Concluded)

e. Income tax assessments

Except for 2015,the Corporation's tax returns through 2016 have been assessed by the tax authorities.

26. EARNINGS PER SHARE

	For the Year Ended December 31 2018	2017
Basic earnings per share	$ 2.01	$ 2.01
Diluted earnings per share	$ 2.00	$ 2.00

The earnings and weighted average number of common stock outstanding in the computation of earnings per share were as follows:

Net Profit for the Year

	For the Year Ended December 31 2018	2017
Earnings used in the computation of basic earnings per share	$ 1,750,724	$ 1,749,409

Weighted average number of common stock outstanding (in thousand stocks):

	For the Year Ended December 31 2018	2017
Weighted average number of common stock	885,703	885,703
Less: Reclassification of the Corporation's stocks held by subsidiaries	(13,754)	(13,754)
Weighted average number of common stock used in the computation of basic earnings per share	871,949	871,949
Effect of potentially dilutive ordinary shares:		
Employees' compensation or bonuses issued to employees	1,436	996
Weighted average number of ordinary shares used in the computation of diluted earnings per share	873,385	872,945

If the Corporation offered to settle compensation or bonuses paid to employees in cash or shares, the Corporation assumed the entire amount of the compensation or bonuses will be settled in shares, and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

27. OPERATING LEASE ARRANGEMENTS

The Corporation as Lessor

Operating leases relate to leasing the investment properties owned by the Corporation with lease terms between 2 to 10 years. According to the agreement, the lease can be terminated by either party by giving 2 to 3 months formal notice in writing to the other party.

28. CAPITAL MANAGEMENT

The Corporation manages its capital to ensure that entities in the Corporation will be able to continue as going concerns while maximizing the return to stockholders through the optimization of the debt and equity balance. The capital structure of the Corporation consists of bank loans and equity of the Corporation.

Financial management department of the Corporation reviews the capital structure on a monthly basis. As part of this review, the financial management department considers whether there were exceptions between consolidated current ratio, consolidated debt ratio and the target ratio set by the financial management department.

29. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments that are not measured at fair value

Management believes the carrying amounts of non-financial assets and financial liabilities recognized in the financial statements approximate their fair values or the fair values cannot be reliably measured.

b. Fair value of financial instruments that are measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Domestic mutual funds	$ 63,589	$ -	$ -	$ 63,589
Financial assets at FVTOCI				
Investments in equity instruments at FVTOCI				
Domestic listed shares	$ 852,579	$ -	$ -	$ 852,579
Domestic unlisted shares	-	-	2,813,699	2,813,699
	$ 852,579	$ -	$ 2,813,699	$ 3,666,278

The financial asset at fair value through profit and loss and the available-for-sale financial asset at fair value through profit and loss in the financial statements belong to Level 1 fair value measurement for the year ended December 31, 2017.

There were no transfers between Levels 1 and 2 in 2018 and 2017.

2) Valuation techniques and assumptions applied for the purpose of measuring fair value

   a) The fair value of financial instruments traded in active markets is based on quoted market prices (including beneficiary certificates that went public).

   b) Valuation techniques and inputs applied for Level 3 fair value measurement: The significant and unobservable input parameter for unlisted investments use market-based approach mainly relates to liquidity discount rate. Market-based approach adopts the equity basis multiplier (P/B) of comparable listed companies, the fair price of the company's stock is calculated after considering the liquidity discount parameter.

c. Categories of financial instruments

	December 31	
	2018	**2017**
<u>Financial assets</u>		
Fair value through profit or loss (FVTPL)		
Mandatorily classified as at FVTPL	$ 63,589	$ -
Loans and receivables (Note 1)	-	1,222,917
Available-for-sale financial assets (Note 2)	-	3,570,613
Financial assets at amortized cost (Note 3)	1,735,805	-
Financial assets at FVTOCI		
Equity instruments	3,666,278	-
<u>Financial liabilities</u>		
Amortized cost (Note 4)	7,888,526	7,246,603

Note 1: The balances include loans and receivables measured at amortized cost, which comprise cash and cash equivalents, debt investments with no active market, notes receivable, trade receivables and other receivables.

Note 2: The balances include the carrying amount of available-for-sale financial assets and financial assets measured at cost.

Note 3: The balances include financial assets at amortized cost, which comprise cash and cash equivalents, debt investments, notes receivable, trade receivables and other receivables.

Note 4: The balances include financial liabilities at amortized cost, which comprise short-term and long-term loans, trade payables and other payables and guarantee deposits.

d. Financial risk management objectives and policies

The Corporation’s major financial instruments included equity and debt investments, trade receivables, trade payables and borrowings. The Corporation’s Corporate Treasury function provides services to the business, monitors and manages the financial risks relating to the operations of the Corporation through internal risk evaluation. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

1) Market risk

The Corporation's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates and interest rates.

a) Foreign currency risk

The Corporation had foreign currency sales and purchases, which exposed the Corporation to foreign currency risk. To protect against reductions foreign assets in value and the volatility of future cash flows caused by changes in foreign exchange rates, the Corporation managed the risk by balancing positions of assets and liabilities denominated in foreign currencies.

The carrying amounts of the Corporation's foreign currency denominated monetary assets and monetary liabilities and of the derivatives exposed to foreign currency risk at the end of the reporting period are set out in Note 33.

Sensitivity analysis

The Corporation was mainly exposed to the USD and EUR.

The following details the effects of a 5% increase or decrease in NTD (the functional currency) against the relevant foreign currencies. For a 5% strengthening/weakening of NTD against the relevant currency, the net profit would be decrease/increase of $22,117 thousand and $556 thousand for the years ended December 31, 2018 and 2017, respectively. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rate is 5%.

b) Interest rate risk

The Corporation was exposed to interest rate risk because of borrowing funds at both fixed and floating interest rates. The risk is managed by the Corporation by maintaining an appropriate mix of fixed and floating rate borrowings, ensuring the most cost-effective hedging strategies are applied.

The carrying amount of the Corporation's financial assets and financial liabilities with exposure to interest rates at the end of the reporting period were as follows:

	December 31	
	2018	**2017**
Fair value interest rate risk		
Financial assets	$ 186,879	$ 108,712
Financial liabilities	4,249,388	3,739,453
Cash flow interest rate risk		
Financial assets	476,743	15,047
Financial liabilities	2,380,000	2,450,000

Sensitivity analysis

The sensitivity analyses below were determined based on the Corporation's exposure to interest rates at the end of the reporting period. A 50 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 50 basis points higher/lower and all other variables were held constant, the Corporation's net profit for the years ended December 31, 2018 and 2017 would decrease/increase by $9,516 thousand and $12,175 thousand, respectively, which was mainly attributable to the Corporation's exposure to interest rates on its cash flow by variable-rate bank loans.

c) Other price risk

The Corporation was exposed to equity price risk through its investments in listed equity securities and beneficiary certificates of open-end funds.

Sensitivity analysis

The sensitivity analyses below were determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 5% higher/lower, pre-tax profit for the year ended December 31, 2018 would have increased/decreased by $3,179 thousand, as a result of the changes in fair value of financial assets at FVTPL, and the pre-tax other comprehensive income for the year ended December 31, 2018 would have increased/decreased by $42,629 thousand, as a result of the changes in fair value of financial assets at FVTOCI.

If equity prices had been 5% higher/lower, the other comprehensive income for the year ended December 31, 2017 would increase/decrease by $40,641 thousand, as a result of the changes in fair value of available-for-sale shares.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Corporation. As at the end of the reporting period, the Corporation's maximum exposure to credit risk which will cause a financial loss to the Corporation due to failure of counterparties to discharge an obligation and financial guarantees provided by the Corporation could arise from:

a) The carrying amount of the respective recognized financial assets as stated in the balance sheets; and

b) The amount of contingent liabilities in relation to financial guarantee issued by the Corporation.

The Corporation adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Corporation only transacts with entities that are rated good. The Corporation uses other publicly available financial information and its own trading records to rate its major customers. The Corporation's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the credit organization.

Trade receivables consisted of a large number of unrelated customers. Ongoing credit evaluation is performed on the financial condition of trade receivables.

Credit risk represents the potential impact to financial asset that the Corporation might encounter if counterparties or third parties breach the contracts. The Corporation evaluated credit risk exposure for contracts with positive carrying value. The Corporation evaluated the credit risk exposure as immaterial because all counterparties are reputable financial institutions and companies with credit ratings.

3) Liquidity risk

The Corporation manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Corporation's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Corporation relies on bank borrowings as a significant source of liquidity. As of December 31, 2018 and 2017, the Corporation had available unutilized bank loan facilities set out in (b) below.

a) Liquidity and interest risk rate tables

The following table details the Corporation's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Corporation can be required to pay.

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ -	$ 800,834	$ -	$ -
Variable interest rate liabilities	-	-	-	2,404,565
Fixed interest rate liabilities	-	-	-	4,276,525
	$ -	$ 800,834	$ -	$ 6,681,090

December 31, 2017

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ -	$ 680,198	$ -	$ -
Variable interest rate liabilities	-	-	-	2,492,715
Fixed interest rate liabilities	110,010	-	-	3,632,297
	$ 110,010	$ 680,198	$ -	$ 6,125,012

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates differ from those estimates of interest rates determined at the end of the reporting period.

b) Financing facilities

	December 31	
	2018	2017
Unsecured bank borrowing limit		
Amount used	$ 7,492,000	$ 7,481,000
Amount unused	3,668,000	2,879,000
	$ 11,160,000	$ 10,360,000
Secured bank borrowing limit		
Amount used	$ -	$ 130,000
Amount unused	130,000	-
	$ 130,000	$ 130,000

30. TRANSACTIONS WITH RELATED PARTIES

The prices and payment terms of these transactions were similar to those for third parties. Details of transactions between the Corporation and other related parties are disclosed below.

Related Party Name	Related Party Category
Far Eastern New Century Corp.	Investors with significant influence over the Corporation
Asia Cement Corporation	Others
Fu Ming Transport Corp.	Others
Fu Dar Transport Corp.	Others
Far Eastern International Bank (FEIB)	Others
Yuan Tong Investment Corp.	Others
Yuan Ding Investment Corp.	Others

a. Sale of goods

	For the Year Ended December 31	
	2018	2017
Investors that have significant influence over the Corporation		
Far Eastern New Century Corp.	$ 1,911,394	$ 1,764,391
Others	43,074	36,518
	$ 1,954,468	$ 1,800,909

b. Operating expenses

	For the Year Ended December 31	
	2018	2017
Others		
Fu Ming Transport Corp.	$ 172,765	$ 156,166

c. Other income

	For the Year Ended December 31	
	2018	2017
Subsidiaries	$ 7,546	$ 7,322

d. Rental income

	For the Year Ended December 31	
	2018	2017
Others		
Fu Dar Transport Corp.	$ 9,694	$ 7,039

e. Cash and cash equivalents

	December 31	
	2018	2017
Others		
FEIB	$ 39,889	$ 43,955

f. Receivables from related parties

	December 31	
	2018	2017
Investors that have significant influence over the Corporation		
Far Eastern New Century Corp.	$ 59,272	$ 147,979
Others	4,823	11,858
	$ 64,095	$ 159,837

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2018 and 2017, no impairment loss was recognized for trade receivables from related parties.

g. Financial assets at amortized cost (Debt investments with no active market)

	December 31	
	2018	2017
Others		
FEIB	$ 60,401	$ 59,409

h. Other payables

	December 31	
	2018	2017
Others	$ 28,350	$ 25,249

i. Acquisitions of financial assets

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Purchase Price
Others				
Hong Zhan International Ltd.	Financial assets at FVTOCI	5,000,000	Shares Everest Textile Co., Ltd.	$65,066

There was no acquisitions of financial assets in 2017.

j. Acquisitions of investment

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Purchase Price
Others				
Tong Fu Investment Co., Ltd.	Investments accounted for using equity method	25,000,000	Shares Tong Fu Investment Co., Ltd.	$250,000

There was no acquisitions of investment in 2017.

k. Disposals of investment accounted for using equity method

For the year ended December 31, 2018

	Line Item	Number of Shares	Underlying Assets	Proceeds	Gain (Loss) on Disposal
Others					
Yuan Ding Investment Corp.	Investment accounted for using equity method	14,675,271	Shares Oriental Resource Development Ltd.	$170,747	$18,966

There was no disposal of investment accounted for using equity method in 2017.

l. Disposals of financial assets

For the year ended December 31, 2017

	Line Item	Number of Shares	Underlying Assets	Proceeds	Gain (Loss) on Disposal
Others					
Yuan Tong Investment Co., Ltd.	Available-for-sale financial assets - non-current	54,103,774	Shares Far Eastern International Bank	$533,485	$156,070

There was no disposal of financial assets in 2018.

m. Compensation of key management personnel

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 35,661	$ 28,844
Post-employment benefits	432	432
	$ 36,093	$ 29,276

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

31. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets had been pledged or mortgaged as collateral for credit lines of deposit overdrafts, as refundable deposits with the Harbor Bureau or Customs Bureau and as guarantees for sales:

	December 31	
	2018	2017
Pledge deposits (financial assets at amortized cost/debt investments with no active market)	$ 76,968	$ 75,976

As of December 31, 2018, the Corporation pledged 28,599 thousand stocks of the subsidiary TFIC as security.

32. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Corporation as of December 31, 2018 and 2017 were as follows:

a. As of December 31, 2018, unused letters of credit for purchases of raw materials amounted to approximately $391,263 thousand, purchase guarantees from banking institution amounted to $451,000 thousand, refundable deposit with the Harbor Bureau amounted to $15,000 thousand, and project performance bond amounted to $4,479 thousand, respectively.

b. Endorsements/guarantees provided to subsidiaries and associates

The Corporation

TFIC	$ 950,000
PPL	921,450
OUCC (Bermuda)	1,535,750
OPYC	921,450
FUPY	460,725
	$ 4,789,375

FUPY

HXYZ	$ 111,659

c. The Corporation has a long-term ethylene purchase agreement with Chinese Petroleum Corporation, Taiwan under which the Corporation is committed to purchase ethylene until December 31, 2018. The purchase price under the agreement is in U.S. dollars.

d. The Corporation has a three-year agreement beginning from 2004, to sell ethylene glycols to major customers, namely, Far Eastern New Century Corporation, Tainan Spinning Co., Ltd., and Shinkong Synthetic Fibers Corporation. The agreement is automatically renewed for successive periods of three years unless otherwise terminated by either party with prior notice. The determined price under the agreement is in U.S. dollars.

e. In May 2016, the Corporation signed a five-year ethylene carbonate designated production/sales agreement with Chi Mei Corporation ("CMC"). Also, the Corporation agreed to purchase from CMC any qualified ethylene glycol by-products which are produced during the manufacturing process. And the purchase price is determined by agreed upon bases. Both sides agreed that the Corporation could sell part of the output to a specific-purpose market.

33. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Corporation entities' significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 19,874	30.72 (USD:NTD)	$ 610,430
Financial liabilities			
Monetary items			
USD	5,309	30.72 (USD:NTD)	$ 163,066
EUR	143	35.20 (EUR:NTD)	5,034
			$ 168,100

December 31, 2017

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 3,029	29.76 (USD:NTD)	$ 90,143
Financial liabilities			
Monetary items			
USD	3,240	29.76 (USD:NTD)	$ 96,422
EUR	136	35.57 (EUR:NTD)	4,838
			$ 101,260

34. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions and investees

1) Financing provided to others. (Table 1)

2) Endorsements/guarantees provided. (Table 2)

3) Marketable securities held. (Table 3)

4) Marketable securities acquired and disposed at costs or prices at least NT$300 million or 20% of the paid-in capital. (Table 4)

5) Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital. (None)

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital. (None)

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 5)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital. (Table 6)

9) Trading in derivative instruments. (None)

10) Information on investees. (Table 7)

b. Information on investments in mainland China

1) Information on any investee Corporation in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, ownership percentage, net income of investees, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investment in the mainland China area. (Table 8)

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses. (None)

35. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on types of goods or services delivered or provided. Specifically, the Corporation's reportable segments under IFRS 8 "Operating Segments" were as follows:

- Ethylene glycols business
- Special chemicals business
- Gas business
- Investment and others

The revenue and operation results and departmental assets have been disclosed in the consolidated financial statements by the reportable segments, please refer to the consolidated financial statements for details.

ORIENTAL UNION CHEMICAL CORPORATION

FINANCINGS PROVIDED TO OTHERS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

No.	Lender	Borrower	Financial Statement Account	Related Parties	Highest Balance for the Period	Ending Balance	Actual Borrowing Amount	Interest Rate	Nature of Financing	Business Transaction Amounts	Reasons for Short-term Financing	Allowance for Impairment Loss	Collateral		Financing Limit for Each Borrower	Aggregate Financing Amount Limits	Note
													Item	Value			
1	PPL	TDIY	Receivables - related parties	Yes	$ 92,600	$ -	$ -	-	Necessary for short-term financing	$ -	Operating capital	$ -	-	$ -	40% of net worth of the Corporation $2,537,805	40% of net worth of the Corporation $2,537,805	
		OUCC (Bermuda)	Receivables - related parties	Yes	340,505	322,508	322,508	-	Necessary for short-term financing	-	Operating capital	-	-	-	200% of net worth of the Corporation $12,689,027	200% of net worth of the Corporation $12,689,027	
2	OUCC (Bermuda)	OPYC	Receivables - related parties	Yes	599,808	447,532	447,532	-	Necessary for short-term financing	-	Operating capital	-	-	-	200% of net worth of the Corporation $757,575	200% of net worth of the Corporation $757,575	
3	FUPY	HXYZ	Other receivables - related parties loans	Yes	234,300	223,766	-	-	Necessary for short-term financing	-	Operating capital	-	-	-	40% of net worth of the Corporation $1,974,495	40% of net worth of the Corporation $1,974,495	
		Far Eastern Industries (Suzhou) Ltd.	Other receivables - related parties loans	Yes	138,107	-	-	-	Necessary for short-term financing	-	Operating capital	-	-	-	40% of net worth of the Corporation $1,974,495	40% of net worth of the Corporation $1,974,495	

TABLE 2

ORIENTAL UNION CHEMICAL CORPORATION

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

No.	Endorser/ Guarantor	Endorsee/Guaranteed		Limits on Endorsement/ Guarantee Given on Behalf of Each Party	Maximum Amount Endorsed/ Guaranteed During the Period	Outstanding Endorsement/ Guarantee at the End of the Period	Actual Borrowing Amount	Amount Endorsed/ Guaranteed by Collaterals	Ratio of Accumulated Endorsement/ Guarantee to Net Equity in Latest Financial Statements (%)	Aggregate Endorsement/ Guarantee Limit	Endorsement/ Guarantee Given by Parent on Behalf of Subsidiaries	Endorsement/ Guarantee Given by Subsidiaries on Behalf of Parent	Endorsement/ Guarantee Given on Behalf of Companies in Mainland China	Note
		Name	Relationship											
0	The Corporation	TFIC	2	50% of net worth of the Corporation $7,483,591	$ 950,000	$ 950,000	$ 559,000	$ -	6.35	100% of net worth of the Corporation $14,967,182	Y	N	N	
		PPL	2	50% of net worth of the Corporation $7,483,591	1,313,775	921,450	-	-	6.16	100% of net worth of the Corporation $14,967,182	Y	N	N	
		OUCC (Bermuda)	2	50% of net worth of the Corporation $7,483,591	1,897,675	1,535,750	383,938	-	10.26	100% of net worth of the Corporation $14,967,182	Y	N	N	
		OPYC	2	50% of net worth of the Corporation $7,483,591	1,347,750	921,450	514,662	-	6.16	100% of net worth of the Corporation $14,967,182	Y	N	Y	
		FUPY	2	50% of net worth of the Corporation $7,483,591	1,191,470	460,725	366,529	-	3.08	100% of net worth of the Corporation $14,967,182	Y	N	Y	
1	FUPY	HXYZ	6	50% of net worth of the Corporation $2,468,119	233,831	111,659	111,435	-	2.26	100% of net worth of the Corporation $4,936,237	N	N	Y	

Note: The relationships between the endorser/guarantor and the endorsee/guaranteed are listed below:

2. Represents the entity whose voting shares are exceed fifty percent (50%) owned directly or indirectly by the Corporation.

6. Represents the entity is guaranteed by the percentage of ownership to the entity under the mutual investment.

ORIENTAL UNION CHEMICAL CORPORATION

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Number of Stocks/Units	Carrying Amount	Percentage of Ownership (%)	Fair Value	
The Corporation	HSBC Global Themes Fund of Funds	-	Financial assets mandatorily classified as at FVTPL - current	5,754,696	$ 63,589	-	$ 63,589	Note 1
	Far Eastern Department Stores Ltd.	Same chairman	Financial assets at FVTOCI - non-current	14,378,228	225,738	1	225,738	Note 2
	Far Eastern New Century Corp.	Same chairman	Same as above	6,888,446	192,188	-	192,188	Note 2
	Asia Cement Corp.	Same chairman	Same as above	8,486,315	288,110	-	288,110	Note 2
	Everest Textile Co., Ltd.	The chairman of Everest Textile Co., Ltd. is a director of the Corporation	Same as above	12,633,023	146,543	3	146,543	Note 2
	Oriental Petrochemical (Taiwan) Co., Ltd.	The Corporation is one of its director	Same as above	282,033,256	2,510,096	14	2,510,096	Note 3
	Grand Cathay Venture Capital Co., Ltd.	-	Same as above	26,666,667	228,000	17	228,000	Note 3
	Eminent Venture Capital Corporation	-	Same as above	4,500,000	24,211	10	24,211	Note 3
	Eminent II Venture Capital Corporation	-	Same as above	6,000,000	47,400	6	47,400	Note 3
	Tai An Technologies Corp.	-	Same as above	249,999	3,992	5	3,992	Note 3
TFIC	Taiwan Semiconductor Manufacturing Co., Ltd	-	Financial assets mandatorily classified as at FVTPL - current	35,000	7,893	-	7,893	Note 2
	Quanta Computer Inc.	-	Same as above	125,000	6,587	-	6,587	Note 2
	The Corporation	Treasury stock	Financial assets mandatorily classified as at FVTPL - non-current	13,753,554	354,842	2	354,842	Note 2
	Far Eastern International Commercial Bank ("FEIC")	The chairman of the Corporation is FEIC's director	Same as above	28,628,630	286,286	1	286,286	Note 2
	Everest Textile Co., Ltd.	The chairman of Everest Textile Co., Ltd. is the Corporation's parent corporation's director	Same as above	11,483,184	133,205	2	133,205	Note 2
	Yue Ding Enterprise Corp.	Related party in substance	Same as above	4,947,144	74,949	5	74,949	Note 3
	Ding Shen Investment Co., Ltd.	Related party in substance	Same as above	39,600,000	345,312	18	345,312	Note 3
	Oriental Petrochemical (Taiwan) Co., Ltd.	The Corporation is one of its director	Same as above	90,043,587	801,388	4	801,388	Note 3

Note 1: The net asset value of the fund as of December 31, 2018.

Note 2: The market value was calculated at closing price on December 31, 2018 provided by the TWSE.

Note 3: The net asset value was calculated based on the latest assessments.

Note 4: The information about investment in subsidiaries and associates, refer to Tables 7 and 8.

TABLE 4

ORIENTAL UNION CHEMICAL CORPORATION

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counterparty (Note)	Relationship (Note)	Beginning Balance		Acquisition		Disposal				Ending Balance	
					Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount	Carrying Amount	Gain (Loss) on Disposal	Number of Shares	Amount
TFIC	Stocks Oriental Petrochemical (Taiwan) Co., Ltd.	Financial assets at FVTOCI - non-current	-	-	36,017,435	$ 360,174	54,026,152	$ 540,262	-	$ -	$ -	$ -	90,043,587	$ 900,436

Note: Investors whose marketable securities are accounted for using the equity method must fill out those columns, the rest will be exempted.

ORIENTAL UNION CHEMICAL CORPORATION

TOTAL PURCHASE FROM OR SALE TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note
			Purchase/ Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
The Corporation	Far Eastern New Century Corp.	Same chairman	Sale	$ (1,911,394)	(6)	Same as those to unrelated parties	-	-	$ 59,272	3	-
FUPY	OPYC	Same parent	Sale	(1,108,174)	(3)	Same as those to unrelated parties	-	-	261,385	13	-
	Far Eastern Industries (Shanghai) Ltd	Others	Sale	(207,533)	(1)	Same as those to unrelated parties	-	-	-	-	-
TDIY	FUPY	Same parent	Sale	(730,953)	(2)	Same as those to unrelated parties	-	-	144,242	7	-
			Purchase	560,757	2	Same as those to unrelated parties	-	-	(105,981)	(4)	-
FUPY	HXYZ	Equity-method investee	Purchase	318,102	1	Same as those to unrelated parties	-	-	-	-	-
	Pet Far Eastern (Holding) Ltd.	Others	Purchase	1,568,623	6	Same as those to unrelated parties	-	-	-	-	-

TABLE 6

ORIENTAL UNION CHEMICAL CORPORATION

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance		Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Impairment Loss
						Amount	Actions Taken		
The Corporation	Far Eastern New Century Corporation	Same chairman	Receivables	$ 59,272	18.45	$ -	-	$ 59,272	$ -
PPL	OUCC (Bermuda)	Same parent	Other receivables - non-current	322,508	Note	-	-	-	-
	FUPY	Subsidiary	Other receivables	135,669	-	-	-	-	-
OUCC (Bermuda)	OPYC	Subsidiary	Other receivables	447,532	Note	-	-	-	-
TDIY	FUPY	Same parent	Receivables	144,242	6.59	-	-	144,242	-
FUPY	OPYC	Same parent	Receivables	261,385	5.17	-	-	261,385	-
	TDIY	Same parent	Other receivables	105,981	-	-	-	58,698	-

Note: The ending balance is primarily consisted of other receivables which include borrowings.

ORIENTAL UNION CHEMICAL CORPORATION

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or Foreign Currency)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		As of December 31, 2018			Net Income (Loss) of the Investee	Share of Profits (Loss)	Note
				December 31, 2018	December 31, 2017	Stocks	%	Carrying Amount			
The Corporation	PPL	British Virgin Islands	Investment	US$ 192,972	US$ 192,972	148,356	100	$ 6,177,584	$ 882,623	$ 882,623	
	TFIC	Taipei City, ROC	Enterprise and financial institution investments	$ 1,110,000	$ 860,000	143,444,736	100	1,155,105	29,152	5,084	Note 1
	OUCC (Bermuda)	British Bermuda Islands	Investment	US$ 70,000	US$ 70,000	39,508	100	378,787	(227,717)	(227,717)	
	KPTC	Taipei City, ROC	Petroleum and petrochemical products	-	109,463	-	-	-	7	1	Note 2

Note 1: The ending balance includes 28,599,328 stocks pledged to financial institutions.

Note 2: Liquidation process of KPTC completed in April 2018.

TABLE 8

ORIENTAL UNION CHEMICAL CORPORATION

INFORMATION OF INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2018	Investment Flows		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2018	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss)	Carrying Amount as of December 31, 2018	Accumulated Repatriation of Investment Income as of December 31, 2018	Note
					Outflow	Inflow							
OPSC	Manufacture and sale of purified terephthalic acid.	US$ 241,310	Indirect	US$ 92,886	US$ -	US$ -	US$ 92,886	RMB 151,781	39	$ 267,480 (Note 2)	$ 2,039,984	$ -	
OPYC	Manufacturing and selling ethanolamine (EA) and alcohol ethoxylates (AEO).	US$ 70,000	Indirect	US$ 70,000	US$ -	US$ -	US$ 70,000	RMB (37,867)	100	(172,668) (Note 2)	637,208	-	
FUPY	Manufacture and sale of ethylene glycol, diethylene glycol, triethylene glycol and ethylene oxide.	US$ 132,000	Indirect	US$ 66,000	US$ -	US$ -	US$ 66,000	RMB 233,129	50	531,845 (Note 2)	2,455,089	-	Note 3
TDIY	Manufacturing and selling gas oxygen, gas nitrogen, liquid oxygen, liquid nitrogen and liquid argon and the warehousing management of ethylene.	US$ 67,000	Indirect	US$ 33,500	US$ -	US$ --	US$ 33,500	RMB 45,973	50	104,815 (Note 2)	1,152,414	-	Note 3
HXYZ	The production and sales of hot water (non-potable water) and steam; the erection and maintenance of heat-supply pipelines; the consultancy service in heat-supply technologies.	RMB 160,000	Indirect	-	-	-	-	RMB (47,178)	25	(107,349) (Note 2)	148,895	-	

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
US$262,386	US$262,386	(Note 1)

Note 1: The Corporation obtained certificate No. 10620425530 from Industrial Development Bureau, Ministry of Economic Affairs according to the “Regulations Governing the Approval of Investment or Technical Cooperation in Mainland China”, the accumulation of fund is not limited.

Note 2: Based on audited financial statements.

Note 3: Significant non-controlling interests.

ORIENTAL UNION CHEMICAL CORPORATION

THE CONTENTS OF STATEMENTS OF MAJOR ACCOUNTING ITEMS

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF CASH AND CASH EQUIVALENTS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Name	Maturity Date	Interest Rate (%)	Amount
Bank balance			
Repurchase agreements collateralized by bonds	January 15, 2019	0.45	$ 109,911
Checking accounts			25,038
Demand deposits (Note)			476,743
Petty cash			110
			$ 611,802

Note: Including demand deposits of US$15,292 thousand and the exchange rate was US$1=30.72.

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF NOTES AND TRADE ACCOUNTS RECEIVABLE
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Client Name	Notes Receivable	Trade Receivables	Total
Related parties			
Far Eastern New Century Corp.	$ -	$ 59,272	$ 59,272
Others (Note)	-	4,823	4,823
	-	64,095	64,095
Unrelated parties			
SINO-Japan Chemical Co., Ltd.	59,850	-	59,850
Lealea Enterprise Co., Ltd.	45,854	53,917	99,771
Shinkong Synthetic Fibers Corp.	-	120,651	120,651
Hung Chou Fiber Industry Co., Ltd.	-	117,832	117,832
Tainan Spinning Co., Ltd.	-	117,731	117,731
Mitsubishi Corporation	-	62,645	62,645
Chi Mei Corporation	-	45,443	45,443
Others (Note)	5,506	322,217	327,723
	111,210	840,436	951,646
Less: Allowance for impairment loss	668	5,437	6,105
	$ 110,542	$ 899,094	$ 1,009,636

Note: The amount of each client in others does not exceed 5% of the account balance.

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

	Beginning Balance		Increase		Decrease		Adjustments on Equity Method	Ending Balance				
	Thousands Shares	Amount	Thousands Shares	Amount	Thousands Shares	Amount	Amount	Thousands Shares	Percentage of Ownership (%)	Amount		Net Assets Value
PPL	148	$ 5,401,845	-	$ -	-	$ -	$ 775,739	148	100	$ 6,177,584		$ 6,344,514
TFIC	114,299	978,699	29,146	250,000	-	-	(73,594)	143,445	100	1,155,105	(Note 2)	1,509,946
OUCC (Bermuda)	40	617,574	-	-	-	-	(238,787)	40	100	378,787		378,787
ORD	14,675	151,781	-	-	14,675	151,781	-	-	-	-		-
KPTC	10,946	9,373	-	-	10,946	9,374	1	-	-	-		-
		$ 7,159,272		$ 250,000		$ 161,155	$ 463,359			$ 7,711,476		

Note 1: Adjustments on equity method amount include:

a) Share of profit of subsidiaries and associates, accounted for using equity method	$ 659,991
b) Exchange differences on translating the financial statements of foreign operations	(117,954)
c) Changes in the Corporation's share of the equity of associates and subsidiaries	(102,746)
d) Changes in capital surplus from dividends distributed to subsidiaries	24,068
	$ 463,359

Note 2: The ending balance includes $28,599 stocks pledged to financial institutions.

STATEMENT 4

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Name	Summary	Number of Shares (In Thousands)	Proceeds	Fair Value (Each)	Fair Value (Total)	Note
Current						
HSBC Global Themes Fund of Funds	Bound Fund	5,755	$ 80,080	$ 11.05	$ 63,589	-

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF CHANGES IN FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NON-CURRENT
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Financial Instruments Name	Balance, January 1, 2018 (Note)		Additions in Investment		Decrease in Investment		Adjustments on Financial Instruments	Balance, December 31, 2018		Accumulated Impairment	Provide a Guarantee or Pledge
	Shares	Fair Value	Shares	Amount	Shares	Amount		Shares	Fair Value		
Asia Cement Corporation	8,486	$ 239,314	-	$ -	-	$ -	$ 48,796	8,486	$ 288,110	NA	None
Far Eastern Department Stores Ltd.	14,378	215,674	-	-	-	-	10,064	14,378	225,738	NA	None
Everest Textile Co., Ltd.	7,385	104,502	5,248	65,066	-	-	(23,025)	12,633	146,543	NA	None
Far Eastern New Century Corp.	6,888	184,610	-	-	-	-	7,578	6,888	192,188	NA	None
Oriental Petrochemical (Taiwan) Co., Ltd.	282,033	2,388,822	-	-	-	-	121,274	282,033	2,510,096	NA	None
Grand Cathay Venture Capital Co., Ltd.	26,667	236,987	-	-	-	-	(8,987)	26,667	228,000	NA	None
Eminent Venture Capital Corporation	6,000	49,077	-	-	1,500	15,000	(9,866)	4,500	24,211	NA	None
Eminent II Venture Capital Corporation	6,000	52,244	-	-	-	-	(4,844)	6,000	47,400	NA	None
Tai An Technologies Corp.	222	694	28	-	-	-	3,298	250	3,992	NA	None
CDIB Biotechnology USA Fund	600	-	-	-	600	-	-	-	-	NA	None
		$ 3,471,924		$ 65,066		$ 15,000	$ 144,288		$ 3,666,278		

Note: Please refer to Note 3.

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF TRADE PAYABLES
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Vendor Name	Amount
CPC Corporation, Taiwan	$ 413,160
Mitsui & Co., Ltd.	96,110
Taiwan Power Company	78,348
Chi Mei Corporation	50,789
Others (Note)	162,427
	$ 800,834

Note: Each of the suppliers was less than 5% of the total account balance.

STATEMENT 7

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF OPERATING REVENUES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Quantity (Ton)	Amount
Ethylene oxide and ethylene glycol products	367,308	$ 9,945,755
Special chemicals products	101,558	3,731,684
Gas products	361,903	942,290
		$ 14,619,729

STATEMENT 8

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF OPERATING COSTS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Raw materials, beginning of year	$ 250,104
Add: Raw material purchased	10,657,439
Catalysts roll-in	180,238
Less: Raw materials, end of year	273,494
Others	11,059
Direct raw material used	10,803,228
Direct labor	72,585
Manufacturing expenses	1,163,725
Manufacturing cost	12,039,538
Work in process, beginning of year	19,639
Add: Work in process purchased	4,762
Less: Work in process, end of year	27,027
Cost of finished goods	12,036,912
Finished goods, beginning of year	546,698
Add: Finished goods purchased	542,685
Others	2,954
Less: Finished goods, end of year	532,077
Others	29,329
Operating costs	$ 12,567,843

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

	Selling and Marketing Expenses	General and Administrative Expenses	Research and Development Expenses	Expected Credit Loss Reversed	Total
Salaries	$ 42,606	$ 75,679	$ 69,874	$ -	$ 188,159
Freight	251,468	-	-	-	251,468
Export sales expenses	57,068	-	-	-	57,068
Depreciation expenses	21,053	722	19,937	-	41,712
Others (Note)	61,614	50,835	70,344	(213)	182,580
	$ 433,809	$ 127,236	$ 160,155	$ (213)	$ 720,987

Note: Total amount of each item in others does not exceed 5% of the account balance.

ORIENTAL UNION CHEMICAL CORPORATION

STATEMENT OF EMPLOYEE BENEFIT, DEPRECIATION AND AMORTIZATION BY FUNCTION
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

	2018				2017			
	Classified as Operating Costs	Classified as Operating Expenses	Classified as Non-operating Expenses	Total	Classified as Operating Costs	Classified as Operating Expenses	Classified as Non-operating Expenses	Total
Labor cost								
Salary expenses	$ 231,272	$ 170,875	$ -	$ 402,147	$ 239,958	$ 137,537	$ -	$ 377,495
Insurance expenses	21,278	11,436	-	32,714	19,162	10,097	-	29,259
Pension	14,374	10,621	-	24,995	13,635	10,055	-	23,690
Board compensation	-	17,284	-	17,284	-	17,131	-	17,131
Others	50,544	15,086	-	65,630	42,680	13,899	-	56,579
	$ 317,468	$ 225,302	$ -	$ 542,770	$ 315,435	$ 188,719	$ -	$ 504,154
Depreciation expenses	$ 495,554	$ 41,712	$ 82	$ 537,348	$ 496,557	$ 30,511	$ 83	$ 527,151
Amortization expenses	$ 8,651	$ 2,476	$ -	$ 11,127	$ 8,570	$ 2,373	$ -	$ 10,943

VII. Review and Analysis of the Financial Position and Performance and Risk Management

1. Financial Position Review

Review and analysis of consolidated financial position

Currency unit: NTD thousand

Item \ Year	2018	2017	Variance	
			Amount	%
Current assets	$ 6,808,358	$ 8,125,752	(1,317,394)	(16)
Property, plant and equipment	15,998,671	16,732,309	(733,638)	(4)
Intangible assets	22,811	24,642	(1,831)	(7)
Other assets	13,568,380	11,069,155	2,499,225	23
Total assets	36,398,220	35,951,858	446,362	1
Current liabilities	9,680,967	9,604,371	76,596	1
Non-current liabilities	8,129,538	8,450,056	(320,518)	(4)
Total liabilities	17,810,505	18,054,427	(243,922)	(1)
Capital stock	8,857,031	8,857,031	0	0
Capital surplus	765,359	741,291	24,068	3
Retained earnings	6,308,071	5,621,845	686,226	12
Other equities	(775,481)	(223,270)	(552,211)	(247)
Treasury stock	(187,798)	(187,798)	0	0
Interest attributable to parent company	14,967,182	14,809,099	158,083	1
Non-controlling interest	3,620,533	3,088,332	532,201	17
Total equities	18,587,715	17,897,431	690,284	4

Note:The causes of changes in analysis of more than 20%:

1. The increase in other assets was a result of the increase of silver catalyst used in production in 2018.
2. The decrease in other equities was a result of the increase in the unrealized loss on financial assets at fair value through other comprehensive income in 2018.

2. Financial Performance Analysis

Analysis on consolidated financial performance

Currency unit: NTD thousand

	2018	2017	Increase (decrease)	Ratio (%)
Operating revenue	$ 32,115,817	$ 28,919,810	$ 3,196,007	11
Operating cost	27,817,014	24,475,255	3,341,759	14
Gross profit	4,298,803	4,444,555	(145,752)	(3)
Operating expenses	1,000,162	942,834	57,328	6
Operating income	3,298,641	3,501,721	(203,080)	(6)
Non-operating revenue and expense	(118,626)	(444,429)	325,803	73
Profit before income tax	3,180,015	3,057,292	122,723	4
Income tax benefit	792,957	661,116	131,841	20
Net profit	2,387,058	2,396,176	(9,118)	-
Other comprehensive income	29,884	(283,917)	313,801	111
Total comprehensive income	2,416,942	2,112,259	304,683	14
Net income attributable to Mother Company	1,750,724	1,749,409	1,315	
Net income attributable to non-controlling interest	636,334	646,767	(10,433)	
Total comprehensive income attributable to Mother company	1,848,130	1,508,935	339,195	
Total comprehensive income attributable to non-controlling interest	568,812	603,324	(34,512)	

1. Notes to increase/decrease:
   (1) The change in non-operating revenue and expense was due to the increase in the share of profit of associates accounted for using the equity method in 2018.
   (2) The change in other comprehensive income was resulted from the increase in unrealized gain on investment in equity instruments designated as at fair value through other comprehensive income in 2018.
2. The crucial factors of 2018 sales volume forecast, and the continuous growth or decline reflected from such forecast are based on the follows: The optimal production rates of EG, GAS and Specialty Chemicals are to follow the overall operation strategy of the Company, to create the optimal profits. (Please refer to “Message to Shareholders” for detail).

3. Cash Flow Review and Analysis

3.1 Analysis of change in cash flow of last year

Currency unit: NTD thousand

Year	Balance of cash-beginning	Net cash flow from operating activities over the year	Cash outflow over the year	Surplus (deficit)	Remedy for deficit in cash	
					Investment plan	Financing plan
2018	1,946,019	4,219,614	4,255,133	1,910,500	—	—

1. Analysis of changes in cash flow
   (1) Operating activities: primarily operating capital inflow.
   (2) Investment activities: primarily capital expenditure and re-investment.
   (3) Financing activities: primarily for the loan repayment and cash dividend distribution.
2. Remedy for cash deficit and liquidity analysis: N/A

3.2 Analysis of change in cash flow of next year

Currency unit: NTD thousand

Year	Balance of cash-beginning	Net cash flow from operating activities over the year	Cash outflow over the year	Surplus (deficit)	Remedy for deficit in cash	
					Investment plan	Financing plan
2019	1,910,500	3,251,000	4,578,000	583,500	—	—

1. Analysis of changes in cash flow
   (1) Cash flow from operating activities: It is expected that the cash inflow from operating activities will be NTD 3,251,000 thousand this year.
   (2) Projected cash outflow: primarily from the projects and cash dividend expenditures; it is expected that the cash outflow from investment and financing activities will be NTD 4,578,000 thousand in 2019.
2. Remedy for cash deficit: N/A

4. The effect of major capital expenditure on the financial position and operation of the company

4.1 Status of utilization of major capital expenditure and source of capital Domestic capital expenditure

Domestic capital expenditure

Currency unit: NTD thousand

Item	Project	Actual source of capital	Est. date of completion	Total capital expenditure	Status of capital utilization				
					2015	2016	2017	2018	2019 estimated
(1)	Paving & rain/polluted water diversion revamp and detention pond construction	Own capital and financing	2019.6	$79,500	$902	$10,998	$21,399	$24,544	$21,657
(2)	EOPO polyether polyol development	Own capital and financing	2019.6	$75,000	—	—	$15,692	$30,235	$29,073
(3)	Waste water recovery in Linyuan	Own capital and financing	2019.7	$68,000	—	—	$230	$10,374	$57,396
(4)	Ethylene glycol butyl ether revamp and eco-friendly processing improvement	Own capital and financing	2019.6	$67,900	—	$260	$41,262	$14,405	$11,973
(5)	Fuels Replacement of EOG heating boiler and RTO with natural gas	Own capital and financing	2020.5	$45,000	—	—	—	—	$36,000

Item	Project	Actual source of capital	Est. date of completion	Total capital expenditure	Status of capital utilization				
					2015	2016	2017	2018	2019 estimated
(6)	Installment of LiBr double effect absorption chilling water system at EOG plant	Own capital and financing	2019.5	$31,800	–	–	–	$23,315	$8,485

Overseas capital expenditure

Currency unit: RMB thousand

Item	Project	Actual source of capital	Est. date of completion	Total capital expenditure	Status of capital utilization			
					2016	2017	2018	2019 estimated
(1)	Oriental Petrochemical (Yangzhou) Corp project on EOD technical innovation & production expansion	Own capital and financing	2019.6	$62,000	$28,065	$10,540	$11,944	$11,451
(2)	Oriental Petrochemical (Yangzhou) Corp project on new storage container of NPEO raw material and accessory equipment	Own capital and financing	2019.6	$2,696	–	$620	$1,859	$217
(3)	Oriental Petrochemical (Yangzhou) Corp project on machinery & electricity of SA storage container	Own capital and financing	2019.12	$1,700	–	–	$650	$1,050

4.2 Projected potential effects

4.2.1 Analysis of effects of the capital expenditures:

Domestic capital expenditure

(1) The paving & rain/polluted water diversion revamp and detention pond construction

To enhance the functions of the environmental protection facility at the Linyuan premiers, to avoid the contamination risk of soil and underground water and reduce the produce of waste water as well as production cost.

(2) EOPO Polyether Polyol development

By developing the production technology of high value-added products of polyurethane (PU) and the related, to complete and enhance Polyol production capability so to increase sales revenue of specialty chemicals.

(3) Waste water recovery in Linyuan

By reducing the consumption of water resources and waste effluents, the Company is able to meet its corporate social responsibility and production concept in cyclic economy.

(4) Ethylene glycol butyl ether revamp and eco-friendly processing improvement

To revitalize and improve the equity utilization of EA plant by introducing new product to increase sales volume and profit.

(5) Fuels Replacement of EOG heating boiler and RTO with natural gas

To reduce not only the air pollutants and carbon emission, but elevate the energy efficiency and reduce equipment maintenance to lower the overall operative cost, the natural gas, which is cleaner and carbon lesser, will be the replaced fuel for process heating and pollution preventing equipment.

(6) The installment of a lithium bromide (LiBr) double effect absorption chilling water system at EOG plant for process improvement

To elevate EOG production efficiency and save energy consumption by recycling the waste heat and reuse as chilling water system to lower the process temperature.

Overseas capital expenditure

(1) Oriental Petrochemical (Yangzhou) Corp, project of EOD technical innovation & expansion

The expansion of the EOD capacity is to increase the product category, volume and the profit.

(2) Oriental Petrochemical (Yangzhou) Corp, project on new storage container of NPEO raw material and accessory equipment

By collaboration with raw material supplier of household detergent product chain to establish competitive NPEO new product line to increase profit.

(3) Oriental Petrochemical (Yangzhou) Corp, project on machinery & electricity of SA storage container

By collaboration with raw material supplier of SAEO to gain advantage in production to increase profit.

4.2.2 The proposed capital expenditures would help to enhance the new products' competitiveness, the reliability and efficiency of the production capability, as well as the Company's identity. There would be no adverse effect on the financial position and operation of the Company.

5. Direct investment policy, the main reasons for profit or loss as well as the corrective action plan over past year, and an investment plan for next year

5.1 Reinvestment policy

The Company has invested indirectly in the business of EO, EG, GAS and storage tank in China, via its holding company, to diversify company operations, enhance its competitiveness and expand market share in China.

5.2 The main reasons for profit or loss and the corrective action plan over past year (2018)

The company's 2018 comprehensive income of associates and joint ventures totaled NTD 659,991 thousands on account of the steady profit from the reinvestment.

5.3 Substantial investment plans for next year: (please refer to p69)

6. Analysis of risk factors

6.1 Impact of interest and exchange rate changes and inflation for last year, and the future

6.1.1 According to the February 2019 report of the Directorate-General of Budget, Accounting & Statistics, the economic growth in 2018 was 2.63%, and CPI annual growth rate 1.35%; and, the expected economic growth in 2019 is 2.27% while CPI annual growth rate 0.73%. The current rediscount rate 1.375% is close to the historic low of 1.25% at the financial crisis. In view of 2019, the US new government policies and the expected raises in interest rate by FED, the uprising of global Protectionism, the following development of Brexit, and the EU political and economic statuses have all added the uncertainties to the prospect of the global economy. To cope with the future economic changes, the Central Bank is expected to maintain its current quantitative easing monetary policy to boost the economy. However, to lower the probable volatility risk of interest rate due to the global economic changes, the Company adopts various days structure for short-term operation, and targets mid- and long-term interest rates, along with financing tools planning of fixed interest rate, in hopes of reducing the effects on the rising interest rate from the future economic changes and the increase in the Company's financing costs. To cut down the overall financing costs, the Company will retain observation on the trend of interest rate and implement long- and short-term financial planning.

6.1.2 The Company and its joint-venture company adopt natural hedging for spot, foreign currency assets and liabilities due to the import & export operation, based on the exchange rate at the moment and the considered accounting cost. Same strategy will be adhered in the future to retain the evaluation of exchange gain and loss caused by exchange rate changes within reasonable level to reduce possible impact on the income of the Company and its joint-venture.

6.2 Policy on high-risk, high-leverage investments, loans, endorsements and guarantees, financial derivative transactions, and other major causes of profit or loss, and future countermeasures:

6.2.1 The Company and its joint-venture have never engaged in any high-risk, high-leverage investments over past year.

6.2.2 The Company and its subsidiaries both defined its "Procedures for Capital Lending to Others" and "Procedures for Endorsements/Guarantees" in accordance with the "Regulations Governing the Loan of Funds and Making of Endorsements/Guarantees by Public Companies" promulgated and enforced by the competent authority, and this was submitted to the Company Board of Directors and the shareholders' meeting. To comply with risk control and protect the Company from any adverse results, "Procedures for Capital Lending to Others" ratified by the Board of Directors and shareholders' meeting will be followed accordingly.

6.3 Future R&D plans and expected R&D expenditure:

In 2019, the Company will strive to develop new EOD/POD product lines and direct R&D towards the following areas:

6.3.1 R&D major capital expenditure projects as follows:

Currency unit: NTD thousand

Name of Project	Expected Result	Projected completion date	Budget (NT$)
Technology development of the special-specification raw materials for EOPO polyether polyol	Producing in sequent processing the polyether polyol with low-degree unsaturation, high molecular weight and high activity to be used in special-specification polyurethane products.	2019/12	100,000
Development of the catalytic technology and manufacturing process for polyetheramine	To develop the catalysts applicable for the catalysis of amination reduction and polyetheramine related products	2019/12	2,000
Continued development of customized high value-added EOD/POD products	The synthesis of various alcohol/phenol/tallow amine, the polyether for UV curing resin, EO/PO copolymer for low foam surfactant	2019/12	2,000
Synthesis and manufacturing process development of the new type concrete additives	To develop a series of products applicable to different requirements of raw materials, environment and properties	2019/12	1,000

6.3.2 Major factors critical to successful R&D:

(1) To establish new synthesis technology of highly reactive and selective catalysts for new product development.

(2) The technology development of the reactor and processing for successive production of polyether polyol with low degree unsaturation, high molecular weight and high activity.

(3) To develop the catalytic technology for successive catalysis of polyether polyol into polyetheramine under high temperature and pressure

(4) To establish the equipment and manufacturing process conditions of successive amination reduction reactions under high temperature and pressure

(5) To enhance better understanding and control over the concrete raw material and properties to provide down- stream customers with overall solution.

(6) To better control the free radical polymerization conditions to secure the stability in manufacturing process and product quality.

6.4 Changes in important policies and the legal environment at home and abroad, and the effect on Company financial status and operation, and countermeasures:

6.4.1 Company management will closely monitor the changes in important policies and the legal environment at home and abroad, and have the professional entity provide suggestions and countermeasures.

6.4.2 In addition to the insurance for assets risk transfer, the Company conducts regular reviews on customers' status prior to deciding the credit ratings and allowances in the Credit Committee, to lower the risk exposure in terms of finance.

6.5 The technological and industrial changes, and their effect on the financial status and operation of the Company, and countermeasures:

Following the advent of a new era of the global internet and the big data, the Company is introducing the intelligent network and the Industry 4.0 technology into the development of its business and manufacturing process, as the products of EO derivatives are inclined to refinement and customization.

The Company has endeavored to transform itself into a SC company to disperse the business risk, especially in the light of the recent and rapid economic growth on the Mainland. With the increase in its average per capita income, the demand for personal care products, detergents, medical care, civil engineering and textile has become substantial. In consideration of the source of raw materials, the Company has established EOD plants in Taiwan and Yangzhou, China, planning to introduce new PO manufacturing process and develop high profit POD products. The present plant in China is primarily engaged in the production of EO derivatives, while Taiwan plant is in producing high value-added products, as a joint development of the Company towards diversification.

6.6 The Impact of changes in corporate identity on Company crisis management, and countermeasures:

The Company steadfastly adheres to an enterprise spirit that highlights "Sincerity, Diligence, Thrift, Prudence and Innovation", and fulfills all their corporate social responsibilities including environmental protection, responsible care and good neighborliness. The business crisis has not resulted in any change of corporate identity.

6.7 The expected benefits and possible risks of merger or acquisition, and countermeasures:

The Company has had no plans for merger or acquisition in recent years.

6.8 Expected benefits and possible risks of facility expansion, and countermeasures:

Please refer to the statement regarding the effects of major capital expenditure on the financial position and operation of the Company over the last year referred to on Pages111~113 of the annual report.

6.9 The risks from centralized purchasing or selling, and countermeasures

The primary supply of Ethylene, the raw material of the main Company products (EO/EG) comes from CPC in Taiwan. To ensure a stable source of material, the Company maintains a long-term stable cooperative relationship with CPC, and is seeking proactively other foreign source supply to reduce the risks attendant to single centralized purchase, to maintain normal production and sales.

Most of the Company's products are sold on the Taiwan market, and surplus is exported to other territories. These territories and industries have been adequately dispersed and there is no likelihood of centralization.

6.10 The impact and risk associated with large share transfers or changes in shareholdings of Directors, Supervisors, or shareholders who hold more than 10% of the Company's shares, and countermeasures: N/A

6.11 The impact and risk associated with changes in management rights, and countermeasures: N/A

6.12 Litigation and non-litigation matters which might materially affect shareholder equity or the price of securities: N/A

6.13 Other substantial risks:

The impairment impact and countermeasures of the Company's information system to its financial operation: According to the risk levels of the information system structure to establish a highly applicable remote backup service to ensure an uninterruptible connection and service, having the backup info forwarded to a different location for preservation. To lower the unexpected natural disasters or man-made errors resulted in the risks in system interruption and further assure of the system recovery in compliance with the schedule targeted, all sorts of simulation tests and contingency drills at the hub were enhanced to ensure the normal operation and information security. In addition, the Company has stipulated the information management regulation to set up and maintain a secure environment for its information and computing system. Even though, with the aforementioned policy, procedures, and information protection measures implemented, there is no guarantee that the Company's computing systems for vital corporate functions as manufacturing and operation can be totally safeguarded from the sabotage via cyberattack of the third party.

7. Other important notes: N/A

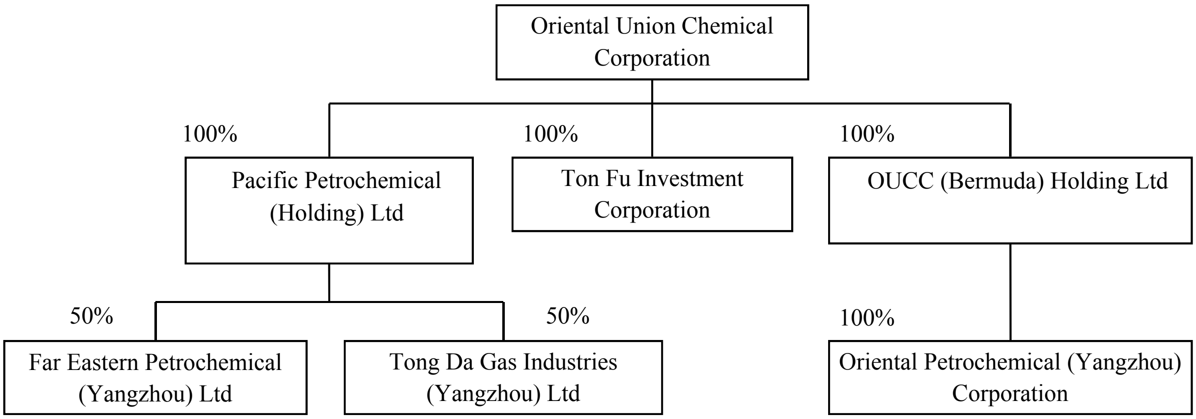
VIII. Special Disclosure

1. Information of affiliates

1.1 Consolidated financial report on affiliates

1.1.1 Organizational chart of affiliations:

Record date: April 13, 2019



1.1.2 Profiles of affiliates

Currency unit: NT$ thousand, unless otherwise noted

Name	Date of incorporation	Address	Paid-in capital	Principal business or product lines
Tong Fu Investment Corporation	May 1998	13F, No. 101, Fu-Hsing N Road, Taipei City	NTD1,434,447	Investment
Pacific Petrochemical (Holding) Ltd	October 2002	P O Box 3140, Road Town British Virgin Islands	US$ 148	Investment
OUCC (Bermuda) Holding Ltd	September 2007	Veritas Place, 6th Floor, 65 Court Street, Hamilton HM 12, Bermuda	US$ 40	Investment
Oriental Petrochemical (Yangzhou) Corporation	July 2008	No. 8, Ya Tung Road, Yi Cheng City, Yangzhou	US$70,000	Production and sale of EA, EC, AEO, PEG and MPEG
Far Eastern Union Petrochemical (Yangzhou) Ltd	May 2012	No. 8, Ya Tung Road, Yi Cheng City, Yangzhou	US$132,200	Production of chemical engineering products (EG, MEG, DEG, TEG and EO)
Tong Da Gas Industries (Yangzhou) Ltd	December 2013	No. 8, Ya Tung Road, Yi Cheng City, Yangzhou	US$67,000	Construction and lease of cryogenic ethylene tank, and production and sale of gas products

1.1.3 Business lines covered by the industries engaged in by affiliates: Please see the profile of affiliates.

1.1.4 The profiles of Directors, Supervisors and Presidents of affiliates.

Unit: share; %
Record date: April 13, 2019

Name	Job title	Name or representative	Shares held when appointed	
			Quantity of shares (share)	Shareholding (%)
Tong Fu Investment Corporation	Director Supervisor President	Oriental Union Chemical Corporation Humphrey Cheng (Chairman), Victoria Peng, Amy Cheng Judy Wang Humphrey Cheng	143,444,736	100
Pacific Petrochemical (Holding) Ltd	Director	Oriental Union Chemical Corporation Justin Tsai, K.S. Wu, Humphrey Cheng	148,356	100
OUCC (Bermuda) Holding Ltd	Director	Oriental Union Chemical Corporation Justin Tsai, K.S. Wu, Humphrey Cheng	39,508	100
Oriental Petrochemical (Yangzhou) Corporation	Director Supervisor President	OUCC (Bermuda) Holding Ltd Humphrey Cheng (Chairman) Justin Tsai, Victoria Peng, C.K. Tsai, James Chou Brian Lee James Chou	—	100
Far Eastern Union Petrochemical (Yangzhou) Ltd	Director Supervisor President	Far Eastern Petrochemical (Holding) Ltd. Humphrey Cheng (Chairman), K.S. Wu Pacific Petrochemical (H) Ltd. Justin Tsai, Victoria Peng, James Chou Judy Wang, Mike Wu James Chou	—	50
Tong Da Gas Industries (Yangzhou) Ltd	Director Supervisor President	Far Eastern Petrochemical (Holding) Ltd. Humphrey Cheng (Chairman), K.S. Wu Pacific Petrochemical (H) Ltd. Justin Tsai, Victoria Peng, James Chou Judy Wang, Mike Wu James Chou	—	50

1.1.5 Overview of affiliates operation:

Currency unit: NT$ thousand, unless otherwise noted
Record date: December 31, 2018

Name	Paid-in capital	Total assets	Total liabilities	Net value	Operating revenue	Operating income	Net Income	EPS (NT$)
Tong Fu Investment Corporation	1,434,447	2,069,495	559,549	1,509,946	41,717	37,905	29,152	0.20
Pacific Petrochemical (H) LTD.	4,608	6,352,106	7,592	6,344,514	0	(29,644)	882,623	5,949.36
OUCC Bermuda (H) LTD.	1,243	1,085,478	706,691	378,787	0	(718)	(227,717)	(5,763.81)
Oriental Petrochemical (Yangzhou) Corporation	2,101,700 RMB464,618	2,121,828 474,118	1,484,620 331,735	637,208 142,383	1,716,661 376,471	(186,856) (40,978)	(172,668) (37,867)	N/A
Far Eastern Union Petrochemical (Yangzhou) LTD.	3,916,584 RMB816,111	12,286,151 2,745,313	7,349,914 1,642,322	4,936,237 1,102,991	16,591,829 3,638,656	1,740,797 381,764	1,063,038 233,129	N/A
Tong Da Gas Industries (Yangzhou) LTD.	2,027,982 RMB411,474	2,454,298 548,408	149,470 33,399	2,304,828 515,009	1,014,885 222,568	280,114 61,430	209,630 45,973	N/A

1.2 Consolidated financial statement of affiliates

Declaration of consolidated financial statement of affiliates

The companies required to be included in the consolidated financial statements of affiliates in accordance with the “Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises” for the year ended December 31, 2018 are all the same as the companies required to be included in the consolidated financial statements of parent and subsidiary companies as provided in International Financial Reporting Standards No. 10, “Consolidated Financial Statements”. Relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. Hence, we do not prepare a separate set of consolidated financial statements of affiliates.

Declarant:
Company name: Oriental Union Chemical Corporation

Responsible person: Douglas T. Hsu

March 19, 2019

1.3 Affiliate report: N/A

2. Private placement of securities: N/A

3. Status of company stock held or disposed of by subsidiaries over past year and up to the date of publication of the annual report:

Date: May 15, 2019 Currency unit: NTD thousand; share; %

Name of subsidiary	Paid-in capital	Source of capital	the Company's shareholding	Date of acquisition or disposal	Quantity of shares and amount	Quantity of shares from disposal and amount	Investment income	Quantity of shares held up to the date of publication of the annual report and amount	Status of pledge	Amount of endorsement/guarantee made by the Company for a subsidiary	Amount loaned by the Company to a subsidiary
Tong Fu Investment Corporation	1,466,590	–	100%	–	–	–	–	Quantity of shares 13,754 thousand shares Amount 187,798	–	850,000	–

4. Other supplementary notes: N/A

5. Any matters of material significance that could have affected shareholder equity or securities price last year and up to the date of publication of the annual report, pursuant to the regulation of article 26-3-2 of securities laws: N/A

Oriental Union Chemical Corporation

Chairman of the Board

徐旭東

東聯化學股份有限公司
Oriental Union Chemical Corp.

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