EPISTAR CORPORATION AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS AND

REPORT OF INDEPENDENT ACCOUNTANTS

DECEMBER 31, 2019 AND 2018

For the convenience of readers and for information purpose only, the auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. In the event of any discrepancy between the English version and the original Chinese version or any differences in the interpretation of the two versions, the Chinese-language auditors' report and financial statements shall prevail.

REPORT OF INDEPENDENT ACCOUNTANTS

PWCR19000309

To the Board of Directors and Shareholders of Epistar Corporation

Opinion

We have audited the accompanying consolidated balance sheets of Epistar Corporation and its subsidiaries (the "Epistar Group") as at December 31, 2019 and 2018, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the reports of other independent accountants, as described in the *Other matters* section of our report, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Epistar Group as at December 31, 2019 and 2018, 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 the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission.

Basis for opinion

We conducted our audit of the consolidated financial statements as of and for the year ended December 31, 2019 in accordance with the "Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants", "Rule No. Financial-Supervisory-Securities-Auditing-1090360805 issued by the Financial Supervisory Commission on February 25, 2020" and generally accepted auditing standards in the Republic of China (ROC GAAS); and in accordance with the "Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants" and ROC GAAS for our audit of the consolidated financial statements as of and for the year ended December 31, 2018.

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 of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and, in forming our opinion thereon, we do not provide a separate opinion on these matters.

The key audit matters in relation to the consolidated financial statements for the year ended December 31, 2019 are outlined as follows:

Evaluation of Impairment Losses of Property, Plant and Equipment, and Goodwill

Description

Please refer to Note 4(20) of the consolidated financial statement for the accounting policy on impairment losses on non-financial assets, Note 5(2) for the accounting estimates and assumptions in relation to impairment losses on non-financial assets, Note 6(11) for the explanations regarding impairment losses on non-financial assets. As of December 31, 2019, the balances of property, plant and equipment, and goodwill were NT$20,577,106 thousand and NT$6,324,659 thousand, respectively.

Epistar Group evaluates the recoverable amounts of idle property, plant and equipment through assessing the fair values after deducting the disposal costs, and of property, plant and equipment, and intangible assets through value in use. Epistar Group evaluates whether impairment losses will be provided for property, plant and equipment, and goodwill utilizing the aforementioned recoverable amounts. The evaluation of value in use for operational property, plant and equipment and intangible assets consists of the estimation of future cash flows and the determination of discount rates. Since the assumptions adopted in the estimation of future cash flows and the results of the estimation would have significant impact on value in use of operational property, plant, and equipment, and intangible assets, it was identified as one of the key audit matters.

How our audit addressed the matter

We have obtained the appraisal report of idle property, plant and equipment prepared by independent values from Epistar Group and assessed the reasonableness of evaluation methods and fair values utilized. For value in use of operational property, plant and equipment, and goodwill, the following procedures were conducted:

1. Interviewed with management and obtained an understanding of Epistar Group's operational procedures in estimating future cash flows and verified the consistency to operation plans approved by the Board of Directors.
2. Discussed operation plans with management to understand the product strategies and their respective execution status.
3. Assessed the reasonableness for assumptions utilized in estimating future cash flows, including projected sales volumes, unit prices and unit costs. Assessed the parameters adopted in determining discount rates, including calculating and comparing the weighted average cost of capital at risk-free rates, the industrial risk premium and the long-term rates of returns.

Evaluation of Inventories

Description

Please refer to Note 4(13) of the consolidated financial statement for the accounting policy on inventory valuation, Note 5(2) for the accounting estimates and assumptions in relation to inventory valuation, Note 6(5) for the explanations regarding inventory valuation. As of December 31, 2019, the balances of inventories and the allowance for valuation loss were NT$4,048,813 thousand and NT$796,510 thousand, respectively.

Epistar Group is primarily engaged in manufacturing and sales of LED wafers and chips. Due to rapid technological developments, short product lifespans and frequent fluctuations of market prices, the risk of decline in market value and obsolescence for inventories is high. Epistar Group evaluates net realized values for inventories which aged over a specific period of time and specific obsolete inventories in order to provide allowance for valuation loss. Since the identification of the above obsolete inventories and their respective net realizable values are subject to management's judgment, it was identified as one of the key audit matters.

How our audit addressed the matter

Our key audit procedures performed in respect of the above included the following:

1. Obtained an understanding of Epistar Group's operations and the nature of its industry and interviewed with management to understand the probability of future sales for those out-of-date inventories and to evaluate the reasonableness of allowance for valuation loss.
2. Obtained and validated the accuracy of the detailed listings of inventories aged over a specific period

of time and specific obsolete inventories. Validated information of historical sales and discounts for those obsolete inventories to assess the reasonableness of policies in providing allowance for inventory valuation loss.

Other matter – Audited by Other Independent Accountants

We did not audit the financial statements of certain consolidated subsidiaries. Those financial statements were audited by other independent accountants, whose reports thereon have been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included in the financial statements and the information on the consolidated subsidiaries disclosed in Note 13 was based solely on the reports of other independent accountants. Total assets of those consolidated subsidiaries amounted to NT$592,832 thousand and NT$812,177 thousand, constituting 1.01% and 1.29% of the consolidated total assets as at December 31, 2019 and 2018, respectively, and total operating revenues were both NT$0 thousand for the years then ended. Furthermore, we did not audit the 2019 and 2018 financial statements of certain equity investments accounted for under the equity method. Those financial statements were audited by other independent accountants whose reports thereon were furnished to us and our opinion expressed herein, insofar as it relates to the amounts included in the consolidated financial statements and certain information disclosed in Note 13 relative to these investments, is based solely on the reports of the other independent accountants. These equity investments amounted to NT$524,371 thousand and NT$849,968 thousand, representing 0.89% and 1.35% of the consolidated total assets as of December 31, 2019 and 2018, respectively, and their comprehensive income (including share of loss of associates and joint ventures accounted for under equity method and share of other comprehensive income/(loss) of associates and joint ventures accounted for under equity method) amounted to NT$70,698 thousand and NT$78,078 thousand, representing (1.79%) and (7.08%) of the consolidated comprehensive loss for the years then ended.

Other matter – Parent company only financial reports

We have also expressed an unmodified opinion on the parent company only financial statements of Epistar Corporation as of and for the years ended December 31, 2019 and 2018.

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 the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission, 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 Epistar 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 Epistar Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including audit committee, are responsible for overseeing the Epistar Group's financial reporting process.

Independent accountant's 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 a 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 ROC GAAS 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 ROC GAAS, 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 Epistar 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 Epistar 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 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 report. However, future events or conditions may cause Epistar Group to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within Epistar Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our 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.

Cheng, Ya-Huei	Hsieh, Chih-Cheng

For and on behalf of PricewaterhouseCoopers, Taiwan

February 26, 2020

The accompanying consolidated financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying consolidated financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

Assets	Notes	December 31, 2019 AMOUNT	%	December 31, 2018 AMOUNT	%
Current assets					
Cash and cash equivalents	6(1)	$ 5,252,823	9	$ 5,532,509	9
Financial assets at fair value through profit or loss - current	6(2)	1,185,215	2	726,406	1
Notes receivable, net	6(4)	2,313,351	4	1,495,653	2
Accounts receivable, net	6(4)	6,705,598	11	7,583,934	12
Accounts receivable - related parties, net	7	172,185	-	1,281,006	2
Other receivables		145,596	-	249,964	-
Other receivables - related parties	7	204	-	305	-
Inventories	6(5)	3,252,303	6	4,705,191	7
Prepayments		943,913	2	1,126,558	2
Non-current assets held for sale - net	6(12)	1,086	-	390,042	1
Other current assets	8	284,774	-	431,118	1
Current Assets		20,257,048	34	23,522,686	37
Non-current assets					
Non-current financial assets at fair value through profit or loss	6(2)	157,762	-	-	-
Non-current financial assets at fair value through other comprehensive income	6(3)	3,640,610	6	3,265,125	5
Investments accounted for under equity method	6(6)	745,901	1	1,117,708	2
Property, plant and equipment	6(7)	20,577,106	35	22,435,949	36
Right-of-use assets	6(8)	1,564,443	3	-	-
Intangible assets	6(9)	7,501,798	13	7,683,928	12
Deferred income tax assets	6(31)	3,944,874	7	3,911,132	6
Other non-current assets	6(10)	341,068	1	802,114	2
Non-current assets		38,473,562	66	39,215,956	63
Total assets		$ 58,730,610	100	$ 62,738,642	100

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EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

Liabilities and Equity	Notes	December 31, 2019 AMOUNT	%	December 31, 2018 AMOUNT	%
Current liabilities					
Short-term borrowings	6(13) and 8	$ 1,683,783	3	$ 1,874,876	3
Short-term notes and bills payable	6(14) and 8	346,318	1	357,717	1
Notes payable		394,586	1	129,942	-
Accounts payable		1,534,323	3	2,301,209	4
Accounts payable - related parties	7	151,677	-	285,825	1
Other payables	6(15) and 7	2,503,852	4	3,820,103	6
Current income tax liabilities		6,774	-	-	-
Current lease liabilities		97,263	-	-	-
Long-term liabilities, current portion	6(16) and 8	117,533	-	165,306	-
Other current liabilities - others		159,451	-	178,857	-
Current Liabilities		6,995,560	12	9,113,835	15
Non-current liabilities					
Long-term borrowings	6(16) and 8	1,011,025	2	409,808	1
Deferred income tax liabilities	6(31)	1,606,655	3	1,402,901	2
Non-current lease liabilities		1,274,186	2	-	-
Other non-current liabilities	6(19)	647,826	1	904,188	1
Non-current liabilities		4,539,692	8	2,716,897	4
Total Liabilities		11,535,252	20	11,830,732	19
Equity attributable to owners of parent company					
Share capital	6(20)				
Share capital - common stock		10,887,014	19	10,887,014	18
Capital surplus	6(21)				
Capital surplus		39,212,772	66	39,515,679	62
Retained earnings	6(22)				
Legal reserve		161,423	-	161,423	-
Special reserve		318,465	1	703,607	1
Accumulated deficit		(3,749,510)	(6)	(385,142)	-
Other equity interest	6(23)				
Other equity interest		(1,285,485)	(2)	(1,317,990)	(2)
Treasury stocks	6(20)	(325,490)	(1)	(211,008)	-
Equity attributable to owners of the parent		45,219,189	77	49,353,583	79
Non-controlling interest		1,976,169	3	1,554,327	2
Total equity		47,195,358	80	50,907,910	81
Total liabilities and equity		$ 58,730,610	100	$ 62,738,642	100

The accompanying notes are an integral part of these consolidated financial statements.

EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except loss per share amounts)

Items	Notes	2019 AMOUNT	2019 %	2018 AMOUNT	2018 %
Sales revenue	6(24) and 7	$ 15,959,831	100	$ 20,306,412	100
Operating costs	6(5) and 7	(16,393,199)	(103)	(17,651,741)	(87)
Operating margin		(433,368)	(3)	2,654,671	13
Unrealized loss(profit) from sales		4,266	-	2,795	-
Realized (loss) profit from sales		(2,795)	-	21,083	-
Net operating margin		(431,897)	(3)	2,678,549	13
Operating expenses	6(29)				
Selling expenses		(299,060)	(2)	(280,781)	(1)
General and administrative expenses		(1,244,059)	(8)	(1,328,003)	(6)
Research and development expenses		(1,999,017)	(12)	(1,959,743)	(10)
Reversal of (expected credit losses)		24,951	-	(9,814)	-
Total operating expenses		(3,517,185)	(22)	(3,578,341)	(17)
Other income and expenses - net	6(25)	257,529	2	220,949	1
Operating loss		(3,691,553)	(23)	(678,843)	(3)
Non-operating income and expenses					
Other income	6(26)	280,776	1	290,378	2
Insurance income from disaster		-	-	206,785	1
Other gains and losses	6(27) and 7	(154,617)	(1)	(538,050)	(3)
Finance costs	6(28)	(160,271)	(1)	(175,678)	(1)
Reversal of (expected credit losses)		(7,054)	-	4,121	-
Share of loss of associates and joint ventures accounted for under equity method	6(6)	(21,383)	-	24,146	-
Total non-operating income and expenses		(62,549)	(1)	(188,298)	(1)
Loss before income tax		(3,754,102)	(24)	(867,141)	(4)
Income tax (expense) benefit	6(31)	(183,418)	(1)	361,277	2
Loss for the year		($ 3,937,520)	(25)	($ 505,864)	(2)

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EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except loss per share amounts)

		Years ended December 31			
		2019		2018	
Items	Notes	AMOUNT	%	AMOUNT	%
Other comprehensive income					
Gains on remeasurements of defined benefit plans	6(16)	$ 5,372	-	$ 31,823	-
Unrealized gains (losses) from investments in equity instruments measured at fair value through other comprehensive income	6(3)	334,904	2	(674,074)	(3)
Share of other comprehensive income of associates and joint ventures accounted for using equity method, components of other comprehensive income that will not be reclassified to profit or loss	6(6)	53,869	-	57,284	-
Income tax related to components of other comprehensive income that will not be reclassified to profit or loss	6(31)	(71,831)	-	111,198	1
Components of other comprehensive income that will not be reclassified to profit or loss		322,314	2	(473,769)	(2)
Components of other comprehensive income that will be reclassified to profit or loss					
Cumulative translation differences of foreign operations		(408,151)	(3)	(238,892)	(1)
Share of other comprehensive income of associates and joint ventures accounted for using equity method, components of other comprehensive income that will be reclassified to profit or loss	6(6)	(6,374)	-	65,149	-
Income tax related to components of other comprehensive income that will be reclassified to profit or loss	6(31)	72,214	1	50,281	-
Components of other comprehensive income that will be reclassified to profit or loss		(342,311)	(2)	(123,462)	(1)
Other comprehensive loss for the year		($ 19,997)	-	($ 597,231)	(3)
Total comprehensive loss for the year		($ 3,957,517)	(25)	($ 1,103,095)	(5)
Loss attributable to:					
Equity holders of the parent company		($ 3,753,797)	(24)	($ 456,146)	(2)
Non-controlling interest		($ 183,723)	(1)	($ 49,718)	-
Comprehensive loss attributable to:					
Equity holders of the parent company		($ 3,720,337)	(24)	($ 1,022,814)	(5)
Non-controlling interest		($ 237,180)	(1)	($ 80,281)	-
Basic loss per share					
Total basic loss per share	6(32)	($ 3.48)		($ 0.42)	
Diluted earnings loss per share					
Total diluted loss per share	6(32)	($ 3.48)		($ 0.42)	

The accompanying notes are an integral part of these consolidated financial statements.

EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

		Equity attributable to owners of the parent											
				Retained earnings			Other equity interest						
	Notes	Share capital - common stock	Capital surplus	Legal reserve	Special reserve	Unappropriated retained earnings(accumulated deficit)	Cumulative translation differences of foreign operations	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Unrealized gain or loss on available-for-sale financial assets	Treasury stocks	Total	Non-controlling interest	Total
2018													
Balance at January 1, 2018		$ 10,887,014	$ 39,970,967	$ -	$ -	$ 1,614,226	($ 415,950)	$ -	($ 268,293)	($ 408,783)	$ 51,379,181	$ 1,604,731	$ 52,983,912
Effects of retrospective application and retrospective restatement	6(22)(23)	-	-	-	-	46,946	3,595	(320,348)	268,293	-	(1,514)	(1,651)	(3,165)
Balance at January 1 after adjustments		10,887,014	39,970,967	-	-	1,661,172	(412,355)	(320,348)	-	(408,783)	51,377,667	1,603,080	52,980,747
Loss for the year	6(22)	-	-	-	-	(456,146)	-	-	-	-	(456,146)	(49,718)	(505,864)
Other comprehensive income(loss) for the year	6(23)	-	-	-	-	25,129	(92,899)	(498,898)	-	-	(566,668)	(30,563)	(597,231)
Total comprehensive loss		-	-	-	-	(431,017)	(92,899)	(498,898)	-	-	(1,022,814)	(80,281)	(1,103,095)
Appropriations of 2017													
Legal reserve used to offset accumulated deficits		-	-	161,423	-	(161,423)	-	-	-	-	-	-	-
Special reserve appropriated		-	-	-	703,607	(703,607)	-	-	-	-	-	-	-
Cash dividends		-	-	-	-	(749,196)	-	-	-	-	(749,196)	-	(749,196)
Cash dividends distributed from capital surplus	6(21)	-	(121,765)	-	-	-	-	-	-	-	(121,765)	-	(121,765)
Adjustments of capital surplus for company's cash dividends received by subsidiaries	6(21)	-	2,052	-	-	-	-	-	-	-	2,052	-	2,052
Cash paid for acquisition of non-controlling interests in subsidiaries		-	-	-	-	-	-	-	-	-	-	(29,329)	(29,329)
Change in investees interest accounted for under equity method	6(21)	-	(458,095)	-	-	-	-	-	-	-	(458,095)	-	(458,095)
Difference between consideration and carrying amount of subsidiaries acquired and disposed	6(21)	-	(732)	-	-	-	-	-	-	-	(732)	-	(732)
Treasury stock transferred to employees	6(21)	-	117,780	-	-	-	-	-	-	273,620	391,400	-	391,400
Purchase of treasury shares		-	-	-	-	-	-	-	-	(75,845)	(75,845)	-	(75,845)
Changes in ownership interests in subsidiaries accounted for using equity method	6(21)	-	5,472	-	-	-	-	-	-	-	5,472	60,857	66,329
Proceeds from disposal of financial assets at fair value through other comprehensive income	6(23)	-	-	-	-	(1,071)	-	1,071	-	-	-	-	-
Proceeds from disposal of investments accounted for using equity method	6(23)	-	-	-	-	-	5,439	-	-	-	5,439	-	5,439
Balance at December 31, 2018		$ 10,887,014	$ 39,515,679	$ 161,423	$ 703,607	($ 385,142)	($ 499,815)	($ 818,175)	$ -	($ 211,008)	$ 49,353,583	$ 1,554,327	$ 50,907,910

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EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

		Equity attributable to owners of the parent											
				Retained earnings			Other equity interest						
	Notes	Share capital - common stock	Capital surplus	Legal reserve	Special reserve	Unappropriated retained earnings(accumulated deficit)	Cumulative translation differences of foreign operations	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Unrealized gain or loss on available-for-sale financial assets	Treasury stocks	Total	Non-controlling interest	Total
2019													
Balance at January 1, 2019		$ 10,887,014	$ 39,515,679	$ 161,423	$ 703,607	($ 385,142)	($ 499,815)	($ 818,175)	$ -	($ 211,008)	$ 49,353,583	$ 1,554,327	$ 50,907,910
Loss for the year	6(22)	-	-	-	-	(3,753,797)	-	-	-	-	(3,753,797)	(183,723)	(3,937,520)
Other comprehensive income(loss) for the year	6(23)	-	-	-	-	4,287	(288,854)	318,027	-	-	33,460	(53,457)	(19,997)
Total comprehensive income(loss)		-	-	-	-	(3,749,510)	(288,854)	318,027	-	-	(3,720,337)	(237,180)	(3,957,517)
Appropriations of 2018	6(21)												
Special reserve appropriated		-	-	-	(385,142)	385,142	-	-	-	-	-	-	-
Cash dividends distributed from capital surplus	6(21)	-	(324,270)	-	-	-	-	-	-	-	(324,270)	-	(324,270)
Difference between consideration and carrying amount of subsidiaries acquired and disposed	6(21)	-	7,304	-	-	-	-	-	-	-	7,304	-	7,304
Changes in ownership interests in subsidiaries accounted for using equity method	6(21)	-	14,059	-	-	-	-	-	-	-	14,059	151,950	166,009
Proceeds from disposal of investments accounted for using equity method	6(23)	-	-	-	-	-	3,332	-	-	-	3,332	-	3,332
Purchase of treasury shares		-	-	-	-	-	-	-	-	(114,482)	(114,482)	-	(114,482)
Cash paid for acquisition of non-controlling interests in subsidiaries		-	-	-	-	-	-	-	-	-	-	(8,848)	(8,848)
Non-controlling interests		-	-	-	-	-	-	-	-	-	-	515,920	515,920
Balance at December 31, 2019		$ 10,887,014	$ 39,212,772	$ 161,423	$ 318,465	($ 3,749,510)	($ 785,337)	($ 500,148)	$ -	($ 325,490)	$ 45,219,189	$ 1,976,169	$ 47,195,358

The accompanying notes are an integral part of these consolidated financial statements.

EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31,2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Notes	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss before tax		($ 3,754,102)	($ 867,141)
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(7)(29)	4,856,814	4,758,265
Amortization (long-term prepaid rents)	6(9)(29)	260,469	274,152
(Reversal of) expected credit losses	12(2)	(17,897)	5,693
Net gain on financial assets at fair value through profit or loss	6(27)	(319,276)	(12,382)
Interest expense	6(28)	159,726	185,417
Interest income	6(26)	(53,916)	(50,650)
Dividend income	6(26)	(29,330)	(13,940)
Effect of exchange rate on loans	6(35)	1,105	(471)
Share of (gain) loss of associates and joint ventures accounted for under the equity method	6(6)	21,383	(24,146)
Impairment loss on non-financial assets	6(11)(27)	209,803	659,774
Loss on disposal of property, plant and equipment	6(27)	1,031	113,219
Loss on disposal of non-current assets held for sale		1,294	-
Loss (gain) on disposal of investments	6(27)	36,955	(310,915)
Gain (loss) on disposal of intangible assets	6(27)	(5,698)	141
Bargain purchase gains	6(27)	(160,110)	-
Other income from recognition of long-term deferred revenues	6(19)	(188,081)	(161,436)
Property, plant and equipment transferred to expenses		100,994	5,858
Expense transferred to property, plant and equipment		(7,318)	-
Expenses transferred to intangible assets		(14,403)	-
Realized loss (profit) from sales		2,795	(21,083)
Unrealized loss from sales		(4,266)	(2,795)
Changes in operating assets and liabilities			
Changes in operating assets			
Financial assets at fair value through profit or loss		(328,148)	(209,576)
Notes receivable		(791,870)	369,378
Accounts receivable		2,068,668	451,896
Other receivables		104,970	633,939
Inventories		1,489,912	(49,252)
Prepayments		182,869	55,776
Other non-current assets		94,142	74,329
Changes in operating liabilities			
Notes payable		277,199	58,144
Accounts payable		(978,059)	(575,610)
Other payables		(642,277)	(515,383)
Other current liabilities		27,010	42,405
Other non-current liabilities		(4,312)	(24,080)
Cash inflow generated from operations		2,598,076	4,849,526
Income tax paid		(40,019)	(211,363)
Interest received		52,717	51,284
Interest paid		(161,118)	(173,884)
Dividend received		61,604	40,649
Net cash flows from operating activities		2,511,260	4,556,212

(Continued)

EPISTAR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31,2019 AND 2018
(Expressed in thousands of New Taiwan dollars)

	Notes	2019	2018
CASH FLOWS FROM INVESTING ACTIVITIES			
Decrease (increase) in other financial assets		$ 139,253	($ 254,105)
Cash refund from financial assets capital reduction		23,903	12,923
Acquisition of non-current financial assets at fair value through other comprehensive income		(52,196)	(396,196)
Proceeds from disposal of non-current financial assets at fair value through other comprehensive income		-	3,052
Acquisition of investments accounted for under the equity method		-	(128,423)
Proceeds from disposal of investments accounted for under the equity method	6(6)	18,150	273,064
Acquisition for property, plant and equipment	6(34)	(2,982,472)	(3,168,197)
Proceeds from disposal of property, plant and equipment	6(34)	192,241	76,272
Acquisition of intangible assets	6(34)	(120,918)	(131,521)
Proceeds from disposal of intangible assets		9,887	-
Decrease (increase) in refundable deposits paid		88,253	(76,295)
Effect on initial consolidation of subsidiaries	6(33)	160,417	-
Net cash flows used in investing activities		(2,523,482)	(3,789,426)
CASH FLOWS FROM FINANCING ACTIVITIES			
(Decrease) increase in short-term loans	6(35)	(133,587)	1,203,014
Increase (decrease) in short-term notes and bill payable	6(35)	2,035	(11,614)
Repayment of long-term loans	6(35)	(599,619)	(3,693,038)
Proceeds from long-term loans	6(35)	1,031,500	1,160,000
(Decrease) increase in guarantee deposits received		(5,790)	22,251
Repayment of principal portion of lease liabilities		(141,969)	-
Cash dividends distributed to non-controlling interest		(8,848)	(29,329)
Purchase of treasury share		(114,482)	(75,845)
Proceed from treasury share transferred to employees		-	286,897
Increase in cash paid for acquisition of non-controlling interests		167,000	66,328
Payment of cash dividends (including distribution from capital surplus)	6(21)	(324,270)	(870,961)
Net cash flows used in financing activities		(128,030)	(1,942,297)
Effects of foreign currency exchange		(139,434)	(128,677)
Net decrease in cash and cash equivalents		(279,686)	(1,304,188)
Cash and cash equivalents at beginning of year		5,532,509	6,836,697
Cash and cash equivalents at end of year		$ 5,252,823	$ 5,532,509

The accompanying notes are an integral part of these consolidated financial statements.

EPISTAR CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. HISTORY AND ORGANIZATION

Epistar Corporation (the "Company") was incorporated on September 19, 1996 and commenced its operations in August 1997. The Company's shares have been traded on the Taiwan Stock Exchange in the Republic of China since May 2001.

Effective October 1, 2003, Inforcomm Semiconductor Corporation was merged with the Company. The Company acquired United Epitaxy Company Ltd. on December 30, 2005, Epitech Technology Corporation and Highlink Technology Corporation on March 1, 2007, and CHIP STAR Ltd. on June 29, 2015, and the Group merged with Huga Optotech Inc. and Formosa Epitaxy Incorporation on September 29, 2016.

The Company and its subsidiaries (collectively referred herein as the "Group") are engaged in the research and development, design, manufacturing and sales of EPI wafers and chips of A1GaInP, AlGaAs and InGaN.

2. THE DATE OF AUTHORIZATION FOR ISSUANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORIZATION

These consolidated financial statements were authorized for issuance by the Board of Directors on February 26, 2020.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards ("IFRS") as endorsed by the Financial Supervisory Commission ("FSC")

New standards, interpretations and amendments endorsed by the FSC effective from 2019 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 9, 'Prepayment features with negative compensation'	January 1, 2019
IFRS 16, 'Leases'	January 1, 2019
Amendments to IAS 19, 'Plan amendment, curtailment or settlement'	January 1, 2019
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
Annual improvements to IFRSs 2015-2017 cycle	January 1, 2019

Except for the following, the above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

IFRS 16, 'Leases'

A. IFRS 16, 'Leases', replaces IAS 17, 'Leases' and related interpretations and SICs. The standard requires lessees to recognise a 'right-of-use asset' and a lease liability (except for those leases with terms of 12 months or less and leases of low-value assets). The accounting stays the same for lessors, which is to classify their leases as either finance leases or operating leases and account for those two types of leases differently. IFRS 16 only requires enhanced disclosures to be provided by lessors.

B. The Group has elected to apply IFRS 16 by not restating the comparative information (referred herein as the 'modified retrospective approach') when applying "IFRSs" effective in 2019 as endorsed by the FSC. Accordingly, the Group increased 'right-of-use asset' by $1,689,828, increased 'lease liability' by $1,441,297 and decreased retained earnings by $248,530 with respect to the lease contracts of lessees on January 1, 2019.

C. The Group has used the following practical expedients permitted by the standard at the date of initial application of IFRS 16:

(a) Reassessment as to whether a contract is, or contains, a lease is not required, instead, the application of IFRS 16 depends on whether or not the contracts were previously identified as leases applying IAS 17 and IFRIC 4.

(b) The use of a single discount rate to a portfolio of leases with reasonably similar characteristics.

(c) The accounting for operating leases whose period will end before December 31, 2019 as short-term leases and accordingly, rent expense of $23,389 was recognised in the fourth quarter of 2019.

(d) The exclusion of initial direct costs for the measurement of 'right-of-use asset'.

(e) The use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

D. The Group calculated the present value of lease liabilities by using the weighted average incremental borrowing interest rate range from 1.855% to 4.35%.

E. The Group recognised lease liabilities which had previously been classified as 'operating leases' under the principles of IAS 17, 'Leases'. The reconciliation between operating lease commitments under IAS 17 measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate and lease liabilities recognised as of January 1, 2019 is as follows:

Operating lease commitments disclosed by applying IAS 17 as at December 31, 2018	$	831,026
Less: Short-term leases	(	8,855)
Add: Adjustments as a result of a different treatment of extension and termination options		779,526
Add: Adjustments relating to changes in the index or rate affecting variable lease payments	(	12,759)
Total lease contracts amount recognised as lease liabilities by applying IFRS 16 on January 1, 2019		1,588,938
Incremental borrowing interest rate at the date of initial application		1.855%~4.35%
Lease liabilities recognised as at January 1, 2019 by applying IFRS 16	$	1,441,297

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Group

New standards, interpretations and amendments endorsed by the FSC effective from 2018 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendment to IAS 1 and IAS 8, 'Disclosure Initiative-Definition of Material'	January 1, 2020

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 3, 'Definition of a business'	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS7 ,'Interest rate benchmark reform'	January 1, 2020

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs endorsed by the FSC are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
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 International Accounting Standards Board
IFRS 17, 'Insurance contracts'	January 1, 2021
Amendments to IAS 1, 'Classification of liabilities as current or non-current'	January 1, 2022

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

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

(2) Basis of preparation

A. Except for the following items, these consolidated financial statements have been prepared under the historical cost convention:

(a) Financial assets and financial liabilities at fair value through profit or loss.

(b) Defined benefit liabilities recognized based on the net amount of pension fund assets less present value of defined benefit obligation.

B. The preparation of financial statements in compliance with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.

(3) Basis of consolidation

A. Basis for preparation of consolidated financial statements:

(a) All subsidiaries are included in the Group's consolidated financial statements. Subsidiaries are all entities controlled by the Group. The Group controls an entity when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of subsidiaries begins from the date the Group obtains control of the subsidiaries and ceases when the Group loses control of the subsidiaries.

(b) Inter-company transactions, balances and unrealized gains or losses on transactions between companies within the Group are eliminated. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Group.

(c) Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. Total comprehensive income is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

(d) Changes in a parent's ownership interest in a subsidiary that do not result in the parent losing control of the subsidiary (transactions with non-controlling interests) are accounted for as equity transactions, i.e. transactions with owners in their capacity as owners. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity.

(e) When the Group loses control of a subsidiary, the Group remeasures any investment retained in the former subsidiary at its fair value. That fair value is regarded as the fair value on initial recognition of a financial asset or the cost on initial recognition of the associate or joint venture. Any difference between fair value and carrying amount is recognized in profit or loss. All amounts previously recognized in other comprehensive income in relation to the subsidiary are reclassified to profit or loss, on the same basis as would be required if the related assets or liabilities were disposed of. That is, when the Group loses control of a subsidiary, all gains or losses previously recognized in other comprehensive income in relation to the subsidiary should be reclassified from equity to profit or loss, if such gains or losses would be reclassified to profit or loss when the related assets or liabilities are disposed of.

B. Subsidiaries included in the consolidated financial statements:

Name of Investor	Name of Subsidiary	Main Business Activities	Ownership December 31, 2019	Ownership December 31, 2018	Description
Epistar Corporation	Lighting Investment Corporation	Professional investment	100%	100%	
Epistar Corporation	Epistar JV Holding (B.V.I.) Co., Ltd.	Professional investment	100%	100%	Note 7
Epistar Corporation	Yen- Rich Technology Corporation	Manufacturing and sales of LED wafers and chips	100%	100%	Note 5
Epistar Corporation	GaN Ventures Co., Limited	Investment holding; sales of electronic components	59.02%	59.02%	
Epistar Corporation	SH Optotech Co.,Ltd.	Manufacturing and sales of LED wafers and chips	49%	49%	Note 2

Name of Investor	Name of Subsidiary	Main Business Activities	Ownership December 31, 2019	Ownership December 31, 2018	Description
Epistar Corporation	Ecoled Venture Co., Limited	Sales of LED lighting products	-	51.99%	Note 13
Epistar Corporation	Full Star Enterprises Limited	Professional investment	100%	100%	
Epistar Corporation	iReach Corporation	Manufacturing, sales, packaging and module design of semiconductor light emitting devices	100%	100%	Note 3
Epistar Corporation	Unikorn Semiconductor Corporation	OEM manufacturing of iii-v semiconductors	85.91%	100%	Note 6
Epistar Corporation	ProLight Opto Technology corporation	Manufacturing and sales of LED wafers and chips	8.52%	12.83%	Note 11
Epistar Corporation	GAN Force Corporation	Design manfacturing and sales of LED	64.31%	-	Note 15
Epistar JV Holding (BVI) Co., Ltd.	LiteStar JV Holding (BVI) Co., Ltd.	Professional investment	82.41%	82.41%	
Epistar JV Holding (B.V.I) Co., Ltd.	United LED Corporation (Hong Kong) Limited	Professional investment	74.86%	74.86%	
Epistar JV Holding (BVI) Co., Ltd.	Episky Hong Kong Co., Limited	Professional investment	100%	100%	Note 8
Epistar JV Holding (BVI) Co., Ltd.	HUGA Holding (SAMOA) Limited	Professional investment	100%	100%	Note 8
Epistar JV Holding(BVI) Co., Ltd	Crystal Light Enterprises Group Limited	Professional investment	100%	100%	Note 8
Epistar JV Holding(BVI) Co., Ltd	Can Yang Investments Limited	Professional investment	80.10%	80.10%	Note 8
LiteStar JV Holding	Epicrystal (Hong Kong) Co., Limited	Professional investment	100%	100%	
Epicrystal (Hong Kong) Co., Limited	Epicrystal Corporation (Changzhou) Ltd.	Manufacturing and sales of LED wafers and chips	93.38%	93.38%	
United LED Corporation (Hong Kong) Limited	United LED Corporation (Shandong) Limited	Manufacturing and sales of LED wafers and chips	100%	100%	
Episky (Hong Kong) Limited	Episky Corporation (Xiamen) Ltd.	Manufacturing and sales of LED wafers and chips	100%	100%	
Episky Corporation (Xiamen) Ltd.	Epicrystal Corporation (Changzhou) Ltd.	Manufacturing and sales of LED wafers and chips	3.31%	3.31%	
Episky Corporation (Xiamen) Ltd.	Episky Corporation (Changzhou) Ltd.	Manufacturing and sales of LED wafers and chips	-	100%	Note 13

Name of Investor	Name of Subsidiary	Main Business Activities	Ownership December 31, 2019	Ownership December 31, 2018	Description
Episky Coporation (Xiamen)Ltd.	EPIRICH (Guangzhou) Co., Ltd	R&D and sales of LEDs	-	100%	Note 10
HUGA Holding (Samoa) Limited	Ecoled Venture Co., Limited	Sales of LED lighting products	-	48.01%	Note 13
Crystal Light Enterprise Group	Ningbo Formosa Epitaxy Incorporation	Trading of LED epitaxy and chips	100%	100%	
GaN Ventures Co., Limited	GV Semiconductor Inc.	R&D and sales of electronic components	-	100%	Note 14
Lighting Investment Corporation	Lighting Investment Ltd.	Professional investment	100%	100%	
Lighting Investment Corporation	allureLux Corporation	Manufacturing and sales of LED wafers and chips	100%	100%	Note 1
Lighting Investment Corporation.	Crystaluxx SARL	Professional investment	100%	100%	Note 4
Lighting Investment Corporation.	Yen-Rich Opto (Hong Kong) Limited	Sales of LED lighting products	100%	100%	Note 4
Lighting Investment Corporation.	Can Yang Investments Limited	Professional investment	6.87%	6.87%	Note 4
Lighting Investment Corporation.	ProLight Opto Technology corporation	Manufacturing and sales of LED wafers and chips	40.46%	29.93%	Note 11
Lighting Investment Ltd.	Luxlite (Hong Kong) Corporation Limited	Professional investment	75%	75%	
Lighting Investment Ltd.	Epistar (Hong Kong) Limited	Professional investment	100%	100%	
Lighting Investment Ltd.	GaN Ventures Co., Limited	Investment holding; sales of electronic components	4.92%	4.92%	
Can Yang Investments Limited	Jiangsu Canyang Optoelectronics Ltd.	Manufacturing and sales of LED wafers and chips	100%	100%	
Luxlite (Hong Kong) Corporation Limited	Luxlite (Shenzhen) Corporation Limited	Sales of LED chips and LED lighting facilities	100%	100%	
AllureLux Coporation	AllureLux Inc	Manufacturing and sales of LED wafers and chips	-	100%	Note 1
Yen-Rich Technology Corporation	ProLight Opto Technology corporation	Manufacturing and sales of LED wafers and chips	3.62%	1.18%	Note 11
Prolight Opto Technology Corporation	ProLight Opto Technology corporation	Professional investment	100%	100%	Note 12
Prolight Opto Technology Corporation	ProLight Opto Technology corporation	Professional investment	100%	100%	Note 12
Prolight Opto Technology Corporation	Shanghai Welight Electronic Co., LTD	Wholesale and export and import of LED and related electronic products	100%	100%	Note 12

Note 1: Newly invested or established companies for the year ended December 31, 2018.

Note 2: Due to the control over the entity’s financial and operational policies, this company is included in the consolidated financial statements.

Note 3: A preparatory office was set up in December 2017. The registration for the subsidiary’s incorporation was completed on January 9, 2018.

Note 4: Lighting Investment Ltd. proceeded with a simple merger with EPI Crystal Investment Inc. on July 1, 2018. Lighting Investment Ltd. was the surviving company while EPI Crystal Investment Inc. was the dissolved company. Thus, Lighting Investment Ltd. succeeded the shares initially held by EPI Crystal Investment Inc.

Note 5: On August 13, 2018, Zheng-Yi Technology Corporation has been renamed as Yen-Rich Technology Corporation.

Note 6: On October 1, 2018, the parent company established the Unikorn Semiconductor Corporation due to the spin-off and transfer of its operation for iii-v semiconductors OEM business. On February 20, 2019, the Board of Directors of Unikorn Semiconductor Corporation during their meeting resolved to increase its capital in the amount of $164,000. The parent company did not participate in the capital increase, therefore, the parent company’s shareholding ratio was decreased to 85.91%.

Note 7: Epistar JV Holding (BVI) Co., Ltd. proceeded with a simple merger with UEC Investment Ltd., Bee Rich Corporation and HUGA Holding (BVI) Limited on November 1, 2018. Epistar JV Holding (BVI) Co., Ltd. was the surviving company while UEC Investment Ltd., Bee Rich Corporation and HUGA Holding (BVI) Limited were the dissolved companies.

Note 8: Epistar JV Holding (BVI) Co., Ltd. proceeded with a simple merger with UEC Investment Ltd., Bee Rich Corporation and HUGA Holding (BVI) Limited on November 1, 2018. Epistar JV Holding (BVI) Co., Ltd. was the surviving company while UEC Investment Ltd., Bee Rich Corporation and HUGA Holding (BVI) Limited were the dissolved companies. Thus, Epistar JV Holding (BVI) Co., Ltd. succeeded the shares initially held by UEC Investment Ltd., Bee Rich Corporation and HUGA Holding (BVI) Limited.

Note 9: The liquidation was completed on February, 2019, as the company will not continue its operation.

Note 10: The liquidation was completed on April, 2019, as the company will not continue its operation.

Note11: Lighting Investment Corporation participated in ProLight Opto Technology Corporation’s private placement. The Group’s shareholding ratio toProLight Opto Technology Corporation was increased to 52.6% and the Group has control overProLight Opto Technology Corporation starting from April 11, 2019, whereby ProLight Opto Technology Corporation became one of the Group’s subsidiaries.

Note12: ProLight Opto Technology Corporation became one of the Group’s subsidiaries, and its wholly-owned subsidiaries were included in the Group’s consolidated entities.

Note13:The liquidation was completed on December, 2019 as the company will not continue its operation.

Note14: On November 11, 2019, GAN Force Corporation acquired a 100% equity interest in GV Semiconductor Inc. from GaN Ventures Co., Limited.

Note 15: Newly invested or established companies for the year ended December 31, 2019.

C. Subsidiaries not included in the consolidated financial statements: None.

D. Adjustments for subsidiaries with different balance sheet dates: None.

E. Significant restrictions: None.

F. Subsidiaries that have non-controlling interest that are material to the Group: None.

(4) Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in New Taiwan dollars, which is the Company's functional and the Group's presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognized in profit or loss in the period in which they arise.

(b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognized in profit or loss.

(c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in profit or loss as part of the fair value gain or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.

(d) Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the statement of comprehensive income within "interest income or finance costs". All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within "other gains and losses".

B. Translation of foreign operations

(a) The operating results and financial position of all the group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;

ii. Income and expenses for each statement of comprehensive income are translated at average exchange rate of that period; and

iii. All resulting exchange differences are recognized in other comprehensive income.

(b) When the foreign operation partially disposed of or sold is an associate or jointly controlled entity, exchange differences that were recorded in other comprehensive income are proportionately reclassified to profit or loss as part of the gain or loss on sale. In addition, even when the Group still retains partial interest in the former foreign associate or jointly controlled entity after losing significant influence over the former foreign associate, or losing joint control of the former jointly controlled entity, such transactions should be accounted for as disposal of all interest in these foreign operations.

(c) When the foreign operation partially disposed of or sold is a subsidiary, cumulative exchange differences that were recorded in other comprehensive income are proportionately transferred to the non-controlling interest in this foreign operation. In addition, even when the Group still retains partial interest in the former foreign subsidiary after losing control of the former foreign subsidiary, such transactions should be accounted for as disposal of all interest in the foreign operation.

(d) Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rates at the balance sheet date.

(5) Classification of current and non-current items

A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:

(a) Assets arising from operating activities that are expected to be realized, or are intended to be sold or consumed within the normal operating cycle;

(b) Assets held mainly for trading purposes;

(c) Assets that are expected to be realized within twelve months from the balance sheet date;

(d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to pay off liabilities more than twelve months after the balance sheet date.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

(a) Liabilities that are expected to be settled within the normal operating cycle;

(b) Liabilities arising mainly from trading activities;

(c) Liabilities that are to be settled within twelve months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

(6) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations are classified as cash equivalents.

(7) Financial assets at fair value through profit or loss

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income.

B. On a regular way purchase or sale basis, the derivative financial assets are recognised and derecognised using trade date accounting, the beneficiary certificates are recognised and derecognised using settlement date accounting.

C. At initial recognition, the Group measures the financial liabilities at fair value. All related transaction costs are recognised in profit or loss. The Group subsequently measures these financial liabilities at fair value with any gain or loss recognised in profit or loss.

D. The Group recognises the dividend income when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

(8) Financial assets at fair value through other comprehensive income

A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Company has made an irrevocable election at initial recognition to recognise changes in fair value in other comprehensive income and debt instruments which meet all of the following criteria:

(a) The objective of the Company’s business model is achieved both by collecting contractual cash flows and selling financial assets; and

(b) The assets’ contractual cash flows represent solely payments of principal and interest.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognised and derecognised using trade date accounting.

C. At initial recognition, the Group measures the financial assets at fair value plus transaction costs. The Group subsequently measures the financial assets at fair value:
The changes in fair value of equity investments that were recognised in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognised as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(9) Accounts and notes receivable

A. Accounts and notes receivable entitle the Group a legal right to receive consideration in exchange for transferred goods or rendered services.

B. The short-term accounts and notes receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(10) Impairment of financial assets

For debt instruments measured at fair value through other comprehensive income and financial assets at amortised cost including accounts receivable or contract assets that have a significant financing component, lease receivables, loan commitments and financial guarantee contracts, at each reporting date, the Group recognises the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognises the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable or contract assets that do not contain a significant financing component, the Group recognises the impairment provision for lifetime ECLs.

(11) Derecognition of financial assets

The Group derecognizes a financial asset when one of the following conditions is met:

A. The contractual rights to receive cash flows from the financial asset expire.

B. The contractual rights to receive cash flows from the financial assets have been transferred and the Group has transferred substantially all risks and rewards of ownership of the financial assets.

C. The Group neither retains nor transfers substantially all risks and rewards of ownership of the financial asset; however, it has not retained control of the financial asset.

(12) Leasing arrangements (lessor)－lease receivables/ operating leases

A. Based on the terms of a lease contract, a lease is classified as a finance lease if the lessee assumes substantially all the risks and rewards incidental to ownership of the leased asset.

(a) At commencement of the lease term, the lessor should record a finance lease in the balance sheet as ‘lease receivables’ at an amount equal to the net investment in the lease (including initial direct costs). The difference between gross lease receivable and the present value of the receivable is recognised as ‘unearned finance income of finance lease’.

(b) The lessor should allocate finance income over the lease term based on a systematic and rational basis reflecting a constant periodic rate of return on the lessor’s net investment in the finance lease.

(c) Lease payments (excluding costs for services) during the lease term are applied against the gross investment in the lease to reduce both the principal and the unearned finance income.

B. Lease income from an operating lease (net of any incentives given to the lessee) is recognised in profit or loss on a straight-line basis over the lease term.

(13) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprise raw materials, direct labor, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs the item by item approach is used in applying the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(14) Non-current assets held for sale

Non-current assets are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction rather than through continuing use, and a sale is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell.

(15) Investments accounted for using the equity method - associates

A. Associates are all entities over which the Group has significant influence but no control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognized at cost.

B. The Group's share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

C. When changes in an associate's equity that are not recognized in profit or loss or other comprehensive income of the associate and such changes does not affect the Group's ownership percentage of the associate, the Group recognizes change in ownership interests in the associate in 'capital surplus' in proportion to its ownership.

D. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Group.

E. In the case that an associate issues new shares and the Group does not subscribe or acquire new shares proportionately, which results in a change in the Group's ownership percentage of the associate but maintains significant influence on the associate, then 'capital surplus' and 'investments accounted for under the equity method' shall be adjusted for the increase or decrease of its share of equity interest. If the above condition causes a decrease in the Group's ownership percentage of the associate, in addition to the above adjustment, the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately on the same basis as would be required if the relevant assets or liabilities were disposed of.

F. Upon loss of significant influence over an associate, the Group remeasures any investment retained in the former associate at its fair value. Any difference between fair value and carrying amount is recognized in profit or loss.

G. When the Group disposes its investment in an associate, if it loses significant influence over this associate, the amounts previously recognized in other comprehensive income in relation to the associate, are reclassified to profit or loss, on the same basis as would be required if the relevant assets or liabilities were disposed of. If it still retains significant influence over this associate, then the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.

H. When the Group disposes its investment in an associate, if it loses significant influence over this associate, the amounts previously recognized as capital surplus in relation to the associate are transferred to profit or loss. If it still retains significant influence over this associate, then the amounts previously recognized as capital surplus in relation to the associate are transferred to profit or loss proportionately.

(16) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalized.

B. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Land is not depreciated. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.

D. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change.

The estimated useful lives of property, plant and equipment are as follows:

Buildings and structures	20 ~ 50 years
Plant and construction	3 ~ 15 years
Machinery and equipment	2 ~ 20 years
Transportation equipment	3 ~ 5 years
Office equipment	2 ~ 20 years
Leasehold improvements	3 ~ 15 years

(17) Leasing arrangements (lessee)－right-of-use assets/ lease liabilities

Effective 2019

A. Leases are recognised as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Group. For short-term leases or leases of low-value assets, lease payments are recognised as an expense on a straight-line basis over the lease term.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate.

Lease payments are comprised of the following:

(a) Fixed payments, less any lease incentives receivable;

(b) Variable lease payments that depend on an index or a rate; and

(c) Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The Group subsequently measures the lease liability at amortised cost using the interest method and recognises interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognised as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments and such changes do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at cost comprising the following:

(a) The amount of the initial measurement of lease liability;

(b) Any lease payments made at or before the commencement date;

(c) Any initial direct costs incurred by the lessee; and

(d) An estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognised as an adjustment to the right-of-use asset.

(18) Leased assets

Prior to 2019

Payments made under an operating lease (net of any incentives received from the lessor) are recognized in profit or loss on a straight-line basis over the lease term.

(19) Intangible assets

A. Patents

Patents are stated at cost and amortized on a straight-line basis over their legal terms or economic service lives, whichever is shorter.

B. Technology know-how

Technology know-how is stated at cost and amortized on a straight-line basis over their economic service lives.

C. Computer software

Computer software is stated at cost and amortized on a straight-line basis over their estimated useful lives of 2 ~ 10 years.

D. Goodwill

Goodwill arising from a business combination is accounted for by applying the acquisition method.

E. Other intangible assets

Other intangible assets, mainly electricity facilities, are stated at cost and amortized using the straight-line method over 3 to 5 years.

(20) Impairment of non-financial assets

A. The Group assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. Except for goodwill, when the circumstances or reasons for recognizing impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortized historical cost would have been if the impairment had not been recognized.

B. The recoverable amounts of goodwill, intangible assets with an indefinite useful life and intangible assets that have not yet been available for use are evaluated periodically. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. Impairment loss of goodwill previously recognized in profit or loss shall not be reversed in the following years.

C. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units, or groups of cash-generating units, that is/are expected to benefit from the synergies of the business combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

(21) Borrowings

A. Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortized cost; any difference between the proceeds and the redemption value is recognized in profit or loss over the period of the borrowings using the effective interest method.

B. Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the drawn-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

(22) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(23) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognized as expenses in that period when the employees render service.

B. Pensions

(a) Defined contribution plans

For defined contribution plans, the contributions are recognized as pension expenses when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in the future payments.

(b) Defined benefit plans

i. Net obligation under a defined benefit plan is defined as the present value of an amount of pension benefits that employees will receive on retirement for their services with the Group in current period or prior periods. The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit net obligation is calculated annually by independent actuaries using the projected unit credit method. The rate used to discount is determined by using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability; when there is no deep market in high-quality corporate bonds, the Group uses interest rates of government bonds (at the balance sheet date) instead.

ii. Remeasurement arising on defined benefit plans are recognized in other comprehensive income in the period in which they arise and are recorded as retained earnings.

iii. Past service costs are recognized immediately in profit or loss.

C. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of employment as a result from either the Group's decision to terminate an employee's employment before the normal retirement date, or an employee's decision to accept an offer of redundancy benefits in exchange for the termination of employment. The Group recognises expense as it can no longer withdraw an offer of termination benefits or it recognises relating restructuring costs, whichever is earlier. Benefits that are expected to be due more than 12 months after balance sheet date shall be discounted to their present value.

D. Employees' compensation and directors' and supervisors' remuneration

Employees' compensation and directors' and supervisors' remuneration are recognized as expenses and liabilities, provided that such recognition is required under legal obligation or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates.

(24) Employee share-based payment

A. For the equity-settled share-based payment arrangements, the employee services received are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period, with a corresponding adjustment to equity. The fair value of the equity instruments granted shall reflect the impact of market vesting conditions and vesting conditions. Compensation cost is subject to adjustment based on the service conditions that are expected to be satisfied and the estimates of the number of equity instruments that are expected to vest under the non-market vesting conditions at each balance sheet date. And ultimately, the amount of compensation cost recognized is based on the number of equity instruments that eventually vest.

B. Treasury stocks transferred to employees:

(a) Restricted stocks issued to employees are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period.

(b) For treasury stocks where employees have to pay to acquire those stocks, if employees resign during the vesting period, they must compensate the Group for the difference between the fair value of the equity instruments and their payments on the stocks.

(25) Income tax

A. The tax expense for the period comprises current and deferred tax. Tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the tax is recognized in other comprehensive income or equity.

B. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year when the stockholders resolve to retain the earnings.

C. Deferred income tax is recognized, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

D. Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. At each balance sheet date, unrecognized and recognized deferred income tax assets are reassessed.

E. Current income tax assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. Deferred income tax assets and liabilities are offset on the balance sheet when the entity has the legally enforceable right to offset current tax assets against current tax liabilities and they are levied by the same taxation authority on either the same entity or different entities that intend to settle on a net basis or realize the asset and settle the liability simultaneously.

F. A deferred tax asset shall be recognized for the carryforward of unused tax credits resulting from research and development expenditures and equity investments to the extent that it is possible that future taxable profit will be available against which the unused tax credits can be utilized.

(26) Share capital

A. Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or stock options are shown in equity as a deduction, net of tax, from the proceeds.

B. Where the Company repurchases the Company's equity share capital that has been issued, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the Company's equity holders. Where such shares are subsequently reissued, the difference between their book value and any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

(27) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities.

(28) Revenue recognition

A. Sales of goods:

(a) The Group is engaged in the research, development and sale of EPI wafers and chips of AlGaInP, AlGaAs and InGaN. Sales are recognised when control of the products has transferred, being when the products are delivered to the customer, the wholesaler has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the customer has accepted the products in accordance with the sales contract, or the Group has objective evidence that all criteria for acceptance have been satisfied.

(b) Sales revenue is recognised on the net amount of contract price after deduction of sales discounts and allowances. The sales discounts and allowances were offered to customers based on aggregate sales over a 12-month period. Accumulated experience is used to estimate and provide for the sales discounts and allowances, using the expected value method, and revenue is only recognised to the extent that it is highly probable that a significant reversal will not occur. The estimation is subject to an assessment at each reporting date. A refund liability is recognised for expected sales discounts and allowances payable to customers in relation to sales made until the end of the reporting period. No element of financing is deemed present as the sales are made with a credit term of 90 days to120 days, which is consistent with market practice.

(c) The Group's obligation to provide a refund for faulty products under the standard warranty terms is recognised as a provision.

(d) A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Revenue from licencing intellectual property

(a) The Group entered into a contract with a customer to grant a licence of patents and intellectual property to the customer. Given the licence is distinct from other promised goods or services in the contract, the Group recognises the revenue from licencing when the licence transfer to a customer either at a point in time or over time based on the nature of the licence granted. The nature of the Group's promise in granting a licence is a promise to provide a right to access the Group's intellectual property if the Group undertakes activities that significantly affect the patents and intellectual property to which the customer has rights, the customer is affected by the Group's activities and those activities do not result in the transfer of a good or a service to the customer as they occur. The royalties are recognised as revenue on a straight-line basis throughout the licencing period. In case the abovementioned conditions are not met, the nature of the Group's promise in granting a licence is a promise to provide a right to use the Group's intellectual property and therefore the revenue is recognised when transferring the licence to a customer at a point in time.

(b) Some contracts require a sales-based royalty in exchange for a licence of intellectual property. The Group recognises revenue when the performance obligation has been satisfied and the subsequent sale occurs.

C. Incremental costs of obtaining a contract

Given that the contractual period lasts less than one year, the Group recognises the incremental costs of obtaining a contract as an expense when incurred although the Group expects to recover those costs.

(29) Government grants

Government grants are recognized at their fair value only when there is reasonable assurance that the Group will comply with any conditions attached to the grants and 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 expenses for the related costs for which the grants are intended to compensate. Government grants related to property, plant and equipment are recognized as non-current liabilities and are amortized to profit or loss over the estimated useful lives of the related assets using the straight-line method.

(30) Business combinations

A. The Group uses the acquisition method to account for business combinations. The consideration transferred for an acquisition is measured as the fair value of the assets transferred, liabilities incurred or assumed and equity instruments issued at the acquisition date, plus the fair value of any assets and liabilities resulting from a contingent consideration arrangement. All acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. For each business combination, the Group measures at the acquisition date components of non-controlling interests in the acquiree that are present ownership interests and entitle their holders to the proportionate share of the entity's net assets in the event of liquidation at either fair value or the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable net assets. All other non-controlling interests should be measured at the acquisition-date fair value.

B. The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of any previous equity interest in the acquiree over the fair value of the identifiable assets acquired and the liabilities assumed is recorded as goodwill at the acquisition date. If the total of consideration transferred, non-controlling interest in the acquire recognised and the fair value of previously held equity interest in the acquiree is less than the fair value of the identifiable assets acquired and the liabilities assumed, the difference is recognised directly in profit or loss on the acquisition date.

(31) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operating Decision-Maker. The Chief Operating Decision-Maker is responsible for allocating resources and assessing performance of the operating segments.

5. CRITICAL ACCOUNTING JUDGEMENTS, ESTIMATES AND KEY SOURCES OF ASSUMPTION UNCERTAINTY

The preparation of these consolidated financial statements requires management to make critical judgements in applying the Group's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgments in applying the Group's accounting policies

None.

(2) Critical accounting estimates and assumptions

The Group makes estimates and assumptions based on the expectation of future events that are believed to be reasonable under the circumstances at the end of the reporting period. The resulting accounting estimates might be different from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

A. Impairment valuation of goodwill, property, plant and equipment

In assessing assets impairment valuation, the Group estimates useful lives of assets and possible income and expenses in the future based on the Group's subjective judgement, any changes in economic condition and strategy of the Group will affect the recoverable amount, please refer to Note 6(11).

As of December 31, 2019, the Group recognised impaired property, plant and equipment of $20,577,106 and goodwill of $6,324,659.

B. Realizability of deferred income tax assets

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized. Assessment of the realizability of deferred income tax assets involves critical accounting judgments and estimates of the management, including the assumptions of expected future sales revenue growth rate and profit rate, available tax credits, tax planning, and etc. Any variations in global economic environment, industrial environment, and laws and regulations might cause material adjustments to deferred income tax assets.

As of December 31, 2019, the Group recognized deferred income tax assets amounting to $3,944,874.

C. Evaluation of inventories

As inventories are stated at the lower of cost and net realizable value, the Group must determine the net realizable value of inventories on balance sheet date using judgements and estimates. Due to the rapid technology innovation, the Group evaluates the amounts of obsolete inventories or inventories without market selling value on balance sheet date, and writes down the cost of inventories to the net realizable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be material changes to the evaluation.

As of December 31, 2019, the carrying amount of inventories was $3,252,303.

D. Financial assets—fair value measurement of unlisted stocks without active market

The fair value of unlisted stocks held by the Group that are not traded in an active market is determined by considering those companies' recent funding raising activities and technical development status, fair value assessment of other companies of the same type, market conditions and other economic indicators existing on balance sheet date. Any changes in these judgements and estimates will impact the fair value measurement of these unlisted stocks. Please refer to Note 12(3) for the financial instruments fair value information.

As of December 31, 2019, the carrying amount of unlisted stocks was $3,465,868.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand and petty cash	$ 1,409	$ 559
Checking accounts and demand deposits	2,232,459	1,571,952
Time deposits	2,642,491	2,929,936
Bonds sold under repurchase agreement	375,004	1,030,062
Cash on transit	1,460	-
	$ 5,252,823	$ 5,532,509

The Group transacts with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote.

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

Items	December 31, 2019	December 31, 2018
Current items:		
Financial assets mandatorily measured at fair value through profit or loss		
Beneficiary certificates	$ 42,300	$ 366,196
Listed stocks	1,285,100	671,789
Emerging stocks	1,775	9,248
	1,329,175	1,047,233
Valuation adjustment	(143,960)	(320,827)
	1,185,215	726,406
Non-current items:		
Financial assets mandatorily measured at fair value through profit or loss		
Unlisted stocks	342,178	333,727
Valuation adjustments	(184,416)	(333,727)
	157,762	-
	$ 1,342,977	$ 726,406

A. The net gain recognized by the Company amounted to $319,276 and $12,382 for the years ended December 31, 2019 and 2018, respectively.

B. Information on credit risk of financial assets at fair value through profit or loss is provided in Note 12(2).

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

Items	December 31, 2019	December 31, 2018
Non-current items:		
Equity instruments		
Listed stocks	$ 724,909	$ 724,909
Emerging stocks	40,872	40,872
Unlisted stocks	3,660,396	3,619,815
	4,426,177	4,385,596
Valuation adjustment	(785,567)	(1,120,471)
	$ 3,640,610	$ 3,265,125

A. Aiming to satisfy the capital expenditure needs, the Group sold $0 and $3,051 of equity securities investments at fair value and resulted in cumulative gains on disposal amounting to $0 and $1,071 during the years ended December 31, 2019 and 2018, respectively.

B. Amounts recognized in profit or loss and other comprehensive income in relation to the financial assets at fair value through other comprehensive income are listed below:

Equity instruments at fair value through other comprehensive income	Year ended December 31, 2019	Year ended December 31, 2018
Fair value change recognised in other comprehensive income	$ 334,904	($ 674,074)
Cumulative losses reclassified to retained earnings due to derecognition	$ -	($ 1,071)
Held at end of year	$ 29,330	$ 26,709

C. As at December 31 2019 and 2018, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at fair value through other comprehensive income held by the Group was $3,640,610 and $3,265,125, respectively.

D. Information relating to credit risk of financial assets at fair value through other comprehensive income is provided in Note 12(2) and (3).

(4) Notes and accounts receivable

	December 31, 2019	December 31, 2018
Notes receivable	$ 2,313,351	$ 1,495,653
Less: Allowance for uncollectible accounts	-	-
	$ 2,313,351	$ 1,495,653
Accounts receivable	$ 6,716,270	$ 7,626,772
Less: Allowance for uncollectible accounts	(10,672)	(42,838)
	$ 6,705,598	$ 7,583,934

A. The ageing analysis of accounts receivable and notes receivable that were past due but not impaired is as follows:

	December 31, 2019		December 31, 2018	
	Accounts receivable	Notes receivable	Accounts receivable	Notes receivable
Not past due	$ 5,940,844	$ 2,313,351	$ 6,415,993	$ 1,432,793
Up to 30 days	417,581	-	407,801	62,860
31 to 90 days	251,526	-	646,500	-
91 to 180 days	31,575	-	136,651	-
Over 180 days	74,744	-	19,827	-
	$ 6,716,270	$ 2,313,351	$ 7,626,772	$ 1,495,653

The above ageing analysis was based on past due date.

B. As of December 31, 2019 and 2018, the Group had outstanding discounted notes receivable amounting to $2,087,234 and $3,349,498. The Group has no payment obligations when the drawers of the notes refuse to pay for the notes at maturity. Those discounted notes receivable were presented as a deduction item to notes receivable. Those discounted notes receivable were deducted from notes receivable directly.

C. Details of the Group’s notes receivable pledged to others as collateral are provided in Note 8.

D. The Group holds collateral including bank deposits, commercial papers, financial assets as well as machinery and equipment as security for accounts receivable. The fair value of the collateral held cannot be reasonably estimated by the Group since it is impracticable.

E. As at December 31 2019 and 2018, without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the notes receivable held by the Company was $2,313,351 and $1,495,653; the maximum exposure to credit risk in respect of the amount that best represents the account receivables held by the Company was $6,705,598 and $7,583,934.

F. Information on credit risk of accounts receivable and notes receivable is provided in Note 12(2).

(5) Inventories

	December 31, 2019		
	Cost	Allowance for valuation loss	Book value
Raw materials	$ 836,777	($ 69,171)	$ 767,606
Work in progress	1,414,292	(275,074)	1,139,218
Finished goods	1,797,744	(452,265)	1,345,479
	$ 4,048,813	($ 796,510)	$ 3,252,303

	December 31, 2018		
	Cost	Allowance for valuation loss	Book value
Raw materials	$ 1,199,529	($ 53,495)	$ 1,146,034
Work in progress	1,640,894	(255,534)	1,385,360
Finished goods	2,791,392	(617,595)	2,173,797
	$ 5,631,815	($ 926,624)	$ 4,705,191

Expense and loss incurred on inventories for the years ended December 31, 2019 and 2018 were as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Cost of goods sold	$ 14,725,377	$ 16,491,389
Effect of recoverable amounts written off	(27,840)	(306,282)
Scrap loss	298,046	268,097
(Gain on reversal of decline)loss on decline in market value	(162,563)	316,079
Loss on idle capacity	1,560,179	882,458
	$ 16,393,199	$ 17,651,741

A decrease in costs of sales was recognised as a result of reversal of net realisable value from sale of obsolete inventories.

(6) Investments accounted for using the equity method

	December 31, 2019	December 31, 2018
Associates:		
Nan Ya Photonics Incorporation	$ 486,534	$ 419,681
Tekcore Co., Ltd.	37,788	62,978
TE Opto Corporation	45,524	43,556
Country Lighting (BVI) Co., Ltd.	91,723	93,996
ProLight Opto Technology Corporation	-	367,309
LEDOULUX Sp.Zo.O	14,051	15,070
Interelight Optotech (Hong Kong) Ltd.	12,705	13,411
ES-LEDRU LLC.	2,231	2,037
LEDAZ Co., Ltd.	55,345	99,670
	$ 745,901	$ 1,117,708

A. The basic information of the associates that are material to the Group is as follows:

		Shareholding ratio			
Company name	Principal place of business	December 31, 2019	December 31, 2018	Nature of relationship	Methods of measurement
Nan Ya Photonics Incorporation	Taiwan	43.26%	43.26%	Associates	Equity method
ProLight Opto Technology corporation	Taiwan	Note 1	42.64%	Note 1	Equity method
KAISTAR Lighting (Xiamen) Co., Ltd.	Mainland China	Note 2	Note 2	Note 2	Note 2

Note 1 : Information is provided in Note (6)B(1)

Note 2 :Information is provided in Note(6) B(j)

B. The summarized financial information of the associates that are material to the Group is as follows:

(a) Balance sheet

	Nan Ya Photonics Incorporation	
	December 31, 2019	December 31, 2018
Current assets	$ 1,073,694	$ 929,990
Non-current assets	160,550	130,111
Current liabilities	(146,214)	(128,743)
Non-current liabilities	(9,481)	(9,520)
Total net assets	$ 1,078,549	$ 921,838
Share in associate's net assets	$ 465,650	$ 398,797
Goodwill	20,884	20,884
Carrying amount of the associate	$ 486,534	$ 419,681

	Prolight Opto Technology Corporation	
	December 31, 2019	December 31, 2018
Current assets	$ -	$ 527,783
Non-current assets	-	521,627
Current liabilities	-	(185,033)
Non-current liabilities	-	(105,323)
Total net assets	$ -	$ 759,054
Share in associate's net assets	$ -	$ 326,336
Goodwill	-	40,973
Carrying amount of the associate	$ -	$ 367,309

(b) Statement of comprehensive income

	Nan Ya Photonics Incorporation	
	Year ended December 31, 2019	Year ended December 31, 2018
Revenue	$ 715,223	$ 879,307
Income for the period from continuing operations	$ 98,098	$ 90,519
Other comprehensive income, net of tax	122,470	155,488
Total comprehensive income	$ 220,568	$ 246,007
Dividends received from associates	$ 27,359	$ -

	Prolight Opto Technology Corporation	
	Year ended December 31, 2019	Year ended December 31, 2018
Revenue	$ 134,787	$ 612,433
Loss for the period from continuing operations	($ 5,829)	($ 40,088)
Other comprehensive loss, net of tax	-	(170)
Total comprehensive loss	($ 5,829)	($ 40,258)
Dividends received from associates	$ -	$ -

	KATSTAR Lighting(Xiamen) Co., Ltd.	
	Year ended December 31, 2019	Year ended December 31, 2018
Revenue	$ -	$ 2,938,630
Loss for the period from continuing operations	$ -	($ 31,106)
Other comprehensive income, net of tax	-	-
Total comprehensive loss	$ -	($ 31,106)
Dividends received from associates	$ -	$ -

(c) The carrying amount of the Group's interests in all individually immaterial associates and the Group's share of the operating results are summarized as follows:

As of December 31, 2019 and 2018, the carrying amount of the Group's individually immaterial associates amounted to $259,367 and $330,718, respectively.

	Year ended December 31, 2019	Year ended December 31, 2018
Loss (income) for the year from continuing operations	($ 106,092)	$ 31,701
Other comprehensive loss	(63)	(435)
Total comprehensive (loss) income	($ 106,155)	$ 31,266

(d) The investment (loss) income from equity method investees for the years ended December 31, 2019 and 2018 amounted to ($21,383) and $24,416, respectively.

(e) The other comprehensive income from equity method investees for the years ended December 31, 2019 and 2018 amounted to $47,495 and $122,433, respectively.

(f) The Group's investment in Tekcore Co., Ltd. has quoted market price. The fair value of Tekcore Co., Ltd. as of December 31, 2019 and 2018 was $100,024 and $117,437, respectively.

(g) The Group disposed all shares of Very Optoelectronic(HUI ZHOU)Co., Ltd. on March 14, 2018 and recognised loss on disposal of investments amounting to $20,091.

(h) The Group disposed all its shares of Tops Electrical Technology Co., Ltd. on March 29, 2018 and recognised loss on disposal of investments amounting to $898.

(i) The Group lost significant influence over PlayNitride Inc. as the shares of PlayNitride Inc. owned by the Group were less than 20% on March 6, 2018, therefore, the Group reclassified it into financial assets at fair value through other comprehensive income and recognised gains on disposal of investments amounting to $80,988 in accordance with IFRSs.

(j) The Group lost significant influence over KAISTAR Lighting (Xiamen) Co., Ltd. as its shares owned by the Group were less than 20% on April 26, 2018. Therefore, the Group reclassified it into financial asset at fair value through other comprehensive income and recognised gain on disposal of investment amounting to $288,956 in accordance with IFRSs.

(k) The Group disposed all its shares of Cosmoled Lighting Limited on June 25, 2018 and recognized loss on disposal of investments amounting to $36,118.

(l) On April 11, 2019, the Group participated in the private placement raised by Prolight Opto Technology Corporation and had control over Prolight Opto Technology Corporation. The Group recognised loss on disposal of investment amounting to $66,847, and details of acquired assets and assumed liabilities are provided in Note 6(33).

(7) Property, plant and equipment

	Land	Buildings and structures	Machinery	Office equipment	Leasehold improvements	Others	Construction in progress and equipment to be inspected	Total
At January 1, 2019								
Cost	$ 124,661	$ 15,723,057	$ 42,314,211	$ 383,665	$ 140,295	$ 432,717	$ 2,359,617	$ 61,478,223
Accumulated depreciation and impairment	-	(8,039,526)	(30,317,096)	(284,200)	(93,216)	(308,236)	-	(39,042,274)
	$ 124,661	$ 7,683,531	$ 11,997,115	$ 99,465	$ 47,079	$ 124,481	$ 2,359,617	$ 22,435,949
2019								
Opening net book amount at January 1	$ 124,661	$ 7,683,531	$ 11,997,115	$ 99,465	$ 47,079	$ 124,481	$ 2,359,617	$ 22,435,949
Additions	-	18,398	237,501	3,654	839	5,333	2,223,999	2,489,724
Transfer	-	675,153	2,331,506	64,491	23,866	31,837	(3,126,853)	-
Acquired from business	387,336	162,444	132,404	1,252	-	59,742	-	743,178
Disposals	-	(14,306)	(163,332)	(28)	-	(3)	(8,959)	(186,628)
Reclassifications	138,524	242,895	(5,655)	929	-	-	(98,797)	277,896
Disaster loss	-	(968,343)	(3,666,167)	(36,488)	(17,454)	(63,530)	-	(4,751,982)
Impairment loss	-	(37,799)	(154,773)	(2)	(15,126)	(222)	-	(207,922)
Net exchange differences	-	(58,809)	(139,738)	(3,338)	(684)	(4,067)	(16,473)	(223,109)
Closing net book amount at December 31	$ 650,521	$ 7,703,164	$ 10,568,861	$ 129,935	$ 38,520	$ 153,571	$ 1,332,534	$ 20,577,106
At December 31, 2019								
Cost	$ 650,521	$ 16,213,192	$ 41,452,304	$ 402,533	$ 161,373	$ 591,882	$ 1,332,534	$ 60,804,339
Accumulated depreciation and impairment	-	(8,510,028)	(30,883,443)	(272,598)	(122,853)	(438,311)	-	(40,227,233)
	$ 650,521	$ 7,703,164	$ 10,568,861	$ 129,935	$ 38,520	$ 153,571	$ 1,332,534	$ 20,577,106

	Land	Buildings and structures	Machinery	Office equipment	Leasehold improvements	Others	Construction in progress and equipment to be inspected	Total
At January 1, 2018								
Cost	$ 124,661	$ 15,131,618	$ 40,882,327	$ 349,727	$ 178,294	$ 438,230	$ 2,526,031	$ 59,630,888
Accumulated depreciation and impairment	-	(7,174,425)	(27,432,634)	(297,562)	(102,100)	(269,240)	(6,046)	(35,282,007)
	$ 124,661	$ 7,957,193	$ 13,449,693	$ 52,165	$ 76,194	$ 168,990	$ 2,519,985	$ 24,348,881
2018								
Opening net book amount at January 1	$ 124,661	$ 7,957,193	$ 13,449,693	$ 52,165	$ 76,194	$ 168,990	$ 2,519,985	$ 24,348,881
Additions	-	16,067	235,886	3,076	571	408	3,350,860	3,606,868
Transfer	-	828,065	2,607,702	67,978	(10,331)	14,875	(3,508,289)	-
Disposals	-	(48,349)	(122,492)	(251)	(177)	2,213	-	(169,056)
Reclassified to non-current assets held for sale	-	-	(99,733)	-	-	-	(1,571)	(101,304)
Reclassifications	-	(408)	136,066	-	-	(563)	13,460	148,555
Depreciation charge	-	(914,874)	(3,743,341)	(22,423)	(18,950)	(58,677)	-	(4,758,265)
Impairment loss	-	(117,327)	(384,148)	-	-	-	-	(501,475)
differences	-	(36,836)	(82,518)	(1,080)	(228)	(2,765)	(14,828)	(138,255)
Closing net book amount at December 31	$ 124,661	$ 7,683,531	$ 11,997,115	$ 99,465	$ 47,079	$ 124,481	$ 2,359,617	$ 22,435,949
At December 31, 2018								
Cost	$ 124,661	$ 15,723,057	$ 42,314,211	$ 383,665	$ 140,295	$ 432,717	$ 2,359,617	$ 61,478,223
Accumulated depreciation and impairment	-	(8,039,526)	(30,317,096)	(284,200)	(93,216)	(308,236)	-	(39,042,274)
	$ 124,661	$ 7,683,531	$ 11,997,115	$ 99,465	$ 47,079	$ 124,481	$ 2,359,617	$ 22,435,949

Information about the property, plant and equipment that were pledged to others as collaterals is provided in Note 8.

(8) Leasing arrangements－lessee

Effective 2019

A. The Group leases various assets including land, buildings, machinery and equipment, transportation equipment and office equipment. Rental contracts are typically made for periods of 2 to 50 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. Short-term leases with a lease term of 12 months or less comprise buildings, transportation equipment and office equipment. Low-value assets comprise office equipment.

C. The carrying amount of right-of-use assets and the depreciation charge are as follows:

	December 31, 2019	
	Carrying amount	
Land	$	1,202,185
Land use right		233,294
Buildings		49,588
Machinery and equipment		45,659
Transportation equipment		6,071
Office equipment		27,646
	$	1,564,443

	Year ended December 31, 2019	
	Depreciation charge	
Land	$	51,385
Buildings		16,215
Machinery and equipment		21,117
Transportation equipment		6,595
Office equipment		9,520
	$	104,832

D. For the year ended December 31, 2019, the additions to right-of-use assets was $58,592.

E. The information on profit and loss accounts relating to lease contracts is as follows:

	December 31, 2019	
Items affecting profit or loss		
Interest expense on lease liabilities	$	27,992
Expense on short-term lease contracts		20,102
Expense on leases of low-value assets		3,287

F. For the year ended December 31, 2019, the Group’s total cash outflow for leases was $165,358.

(9) Intangible assets

	Patents	Goodwill	Software	Others	Total
At January 1, 2019					
Cost	$ 2,396,119	$ 6,324,659	$ 356,717	$ 95,092	$ 9,172,587
Accumulated amortisation and impairment	(1,175,693)	-	(224,972)	(87,994)	(1,488,659)
	$ 1,220,426	$ 6,324,659	$ 131,745	$ 7,098	$ 7,683,928
2019					
Opening net book amount as at January 1,	$ 1,220,426	$ 6,324,659	$ 131,745	$ 7,098	$ 7,683,928
Additions－acquired separately	6,436	-	65,137	1,652	73,225
Additions－acquired through business combinations	153	-	-	331	484
Disposals	(4,189)	-	-	-	(4,189)
Reclassifications	8,482	-	3,520	2,400	14,402
Amortisation charge	(193,543)	-	(63,453)	(3,473)	(260,469)
Net exchange differences	(4,470)	-	(1,113)	-	(5,583)
Closing net book amount as at December 31,	$ 1,033,295	$ 6,324,659	$ 135,836	$ 8,008	$ 7,501,798
At December 31, 2019					
Cost	$ 2,406,242	$ 6,324,659	$ 422,203	$ 99,476	$ 9,252,580
Accumulated amortisation and impairment	(1,372,947)	-	(286,367)	(91,468)	(1,750,782)
	$ 1,033,295	$ 6,324,659	$ 135,836	$ 8,008	$ 7,501,798

	Patents	Goodwill	Software	Others	Total
At January 1, 2018					
Cost	$ 2,351,991	$ 6,324,659	$ 297,857	$ 92,391	$ 9,066,898
Accumulated amortisation and impairment	(966,045)	-	(168,754)	(85,137)	(1,219,936)
	$ 1,385,946	$ 6,324,659	$ 129,103	$ 7,254	$ 7,846,962
2018					
Opening net book amount as at January 1	$ 1,385,946	$ 6,324,659	$ 129,103	$ 7,254	$ 7,846,962
Additions－acquired separately	33,030	-	59,400	2,700	95,130
Disposals	-	-	(141)	-	(141)
Reclassifications	6,487	-	955	-	7,442
Amortisation charge	(207,370)	-	(57,316)	(2,856)	(267,542)
Net exchange differences	2,333	-	(256)	-	2,077
Closing net book amount as at December 31,	$ 1,220,426	$ 6,324,659	$ 131,745	$ 7,098	$ 7,683,928
At December 31, 2018					
Cost	$ 2,396,119	$ 6,324,659	$ 356,717	$ 95,092	$ 9,172,587
Accumulated amortisation and impairment	(1,175,693)	-	(224,972)	(87,994)	(1,488,659)
	$ 1,220,426	$ 6,324,659	$ 131,745	$ 7,098	$ 7,683,928

Details of amortisation on intangible assets are as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Operating costs	$ 117,057	$ 114,510
Selling expenses	4,576	7,283
Administrative expenses	58,766	58,310
Research and development expenses	80,070	87,439
	$ 260,469	$ 267,542

(10) Long-term prepaid rents (shown under "Other non-current assets")

Effective 2018

	Year ended December 31, 2018
Land use right	$ 248,530

In December 2006, and May, June and July 2010, the Group signed a land use right contract with Xiamen Municipal Bureau of Land, Resources And Housing Administration, Yangzhou National Territory Resources Bureau, Changzhou Land and Resource Bureau and Jining Municipal Bureau of State Land for use of the land in Xiamen Torch High-tech Industrial Development Zone of the People's Republic of China, Yangzhou Economic & Technological Development Zone, Wujin, Changzhou, Jiangsu, China and Jining National High-tech Industrial Development Zone with term of 50 years. All rentals had been paid on the contract date. The Group recognised rental expenses of $6,553 for the year ended December 31, 2018.

(11) Impairment of non-financial assets

A. During the years ended December 31, 2019 and 2018, the reallocation of production lines resulted in impairment of the Group's property, plant and equipment and non-current assets classified as held for sale. The Group wrote down the carrying amount of the asset based on the recoverable amount and recognised accordingly an impairment loss of $209,803 and $659,774, respectively. The recoverable amount is the property's fair value less costs of disposal. The fair value is classified as a level 3 fair value. The impairment loss is detailed below:

	Year ended December 31, 2019	Year ended December 31, 2018
	Recognised in profit or loss	Recognised in profit or loss
Impairment loss - buildings and structures	$ 37,799	$ 117,327
Impairment loss - machinery	154,773	384,148
Impairment loss - non-current assets held for sale	1,881	158,299
Impairment loss - office equipment	2	-
Impairment loss - Leasehold improvements	15,126	-
Impairment loss - other equipment	222	-
	$ 209,803	$ 659,774

B. Goodwill is allocated to the Group's cash-generating units identified according to operating segment. The recoverable amount of all cash-generating units has been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by the management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below.

The recoverable amount of all cash-generating units calculated using the value-in-use exceeded their carrying amount, therefore goodwill was not impaired. The key assumptions used for value-in-use calculations are as follows:

	Year ended December 31, 2019			Year ended December 31, 2018		
	1st year	2~5 years	After 6th year	1st year	2~5 years	After 6th year
Revenue growth rate	33.55%	6.82%~ 14.7%	0%	26.63%	9.87%~ 30.11%	0%
Gross margin rate	17.59%	28.4%~ 34.9%	34.80%	15.56%	23.0%~ 26.8%	26.80%
Discount rate	11.39%	11.39%	11.39%	14.20%	14.20%	14.20%

(a) Revenue growth rate: Estimation refers to relevant market information and relevant operating and sales plan.

(b) Gross margin rate: Estimation refers to historical data and relevant operating and sales plan.

(c) Discount rate: The rate before tax and reflecting specific risk of relevant operating segment.

(12) Non-current assets held for sale

	December 31, 2019	December 31, 2018
Property, plant and equipment	$ 1,086	$ 390,042

(13) Short-term borrowings

	December 31, 2019	December 31, 2018
Bank borrowings		
Unsecurred borrowings	$ 1,683,783	$ 1,874,876
Interest rate range-NTD	1.02%~1.11%	0.90%
Interest rate range-foreign currency	3.92%~4.88%	3.06%~5.22%

As of December 31, 2019 and 2018, the Group has endorsements to Episky Corporation (Xiamen) Ltd., Jiangsu Canyang Optoelectronics Ltd., Ecoled Venture Co., Limited and Yen-Rich Opto (Hong Kong) Limited of $3,757,860 and $3,270,624, respectively.

(14) Short-term notes and bills payable

	December 31, 2019			
	Rate (%)	Amount	Name of bank	Collaterals
Payables for bankers' acceptance	-	$ 346,318	BANK OF COMMUNICATIONS	Note 8

	December 31, 2018			
	Rate (%)	Amount	Name of bank	Collaterals
Payables for bankers' acceptance	-	$ 357,717	BANK OF COMMUNICATIONS	Note 8

(15) Other payables

Items	December 31, 2019	December 31, 2018
Payables on wages, salaries and bonus	$ 493,144	$ 599,908
Compensation due to employees, directors and supervisors	69,641	69,516
Payables on personnel expense	184,760	206,409
Payable on machinery and equipment	545,544	1,153,185
Payables on consumable goods and equipment repair expense	304,019	579,919
Payables on processing fees	353,618	423,397
Payables on reticle expense	19,708	28,043
Payables on gas expense	69,609	76,542
Payables on insurance expense	4,106	7,752
Payable on intangible assets	55,993	47,159
Others	403,710	628,273
	$ 2,503,852	$ 3,820,103

(16) Long-term borrowings

Type of borrowings	Borrowing period and repayment term	December 31, 2019
Bank borrowings		
Secured borrowings	Before October 29, 2022	$ 99,808
Unsecured borrowings	November 2, 2021 Repay fully at maturity	500,000
Unsecured borrowings	Before November 5, 2024	390,000
Secured borrowings	Before December 12, 2024	138,750
		1,128,558
Less: Current portion		(117,533)
		$ 1,011,025
Interest rate range		1.20%~1.43%

Type of borrowings	Borrowing period and repayment term	December 31, 2018
Bank borrowings		
Secured borrowings	Before October 29, 2022	$ 137,971
Unsecured borrowings	Before December 30, 2019	127,143
Unsecured borrowings	November 2, 2021 Repay fully at maturity	10,000
Unsecured borrowings	November 27, 2020 Repay fully at maturity	300,000
		575,114
Less: Current portion		(165,306)
		$ 409,808
Interest rate range		1.00%~1.39%

The Company, Formosa Inc. and Jiangsu Canyang Optoelectronics Ltd have signed a syndicated contract with 7 financial institutions including Land Bank of Taiwan. The lead bank is Land Bank of Taiwan. The credit granting period is 3 years from the first drawing date, May 30, 2016. Before the maturity, the granting period can be extended for 2 years upon application. The loan has been paid off in advance and the credit line has been cancelled on May 30, 2018.

A. Credit lines are as follows:

(a) Tranche (A): Credit line is $4,000,000. Details of Tranche A are as follows:
   i Tranche (A-1): To redeem the 2nd overseas convertible bond and the former facility of Tranche (B) of Formosa Inc., the credit line is $1,500,000 which can be drawn separately but cannot be redrawn.
   ii Tranche (A-2): Funds for fulfilling the Company's mid-term operational needs. Credit line is $2,500,000 and can be redrawn.
(b) Tranche (B): Credit line is $1,600,000. Details of Tranche B are as follows:
   i Tranche (B-1): To repay former financial debt of Formosa Inc., the credit line is $600,000 and cannot be redrawn.
   ii Tranche (B-2): To fulfil midterm operating capital, the credit line is $1,000,000 and can be redrawn.
(c) The balance of Tranche (A) and Tranche (B) cannot exceed the total credit line.
(d) Tranche (C): Credit line is US$19,000 thousand. Details of Tranche C are as follows:
   Tranche (C-1): To repay financial debt of Jiangsu Canyang Optoelectronics Ltd., the credit line is USD 19,000 thousand and can be drawn at lump sum but cannot be redrawn.

B. The Company has promised to maintain the following financial ratios and conditions that are based on the audited consolidated financial statements within the credit granting period (if violating following financial rates, annual rates of 0.125% should be added in accordance with contract):
   (a) Current ratio more than or equal to 100%;
   (b) Debt ratio less or equal to 100%;
   (c) Times interest earned ratio no less than 400%;
   (d) Tangible net worth (shareholders' equity - intangible assets) not less than $45,000,000 (inclusive).

C. Due to the business combination of the Group and Formosa Inc. on September 29, 2016, the aforementioned Tranche (B), Tranche (B-1) and Tranche (B-2) are not applicable to the contract.

D. The Company's financial commitments to borrowing from Taipei Fubon Commercial Bank Co., Ltd:
   Financial commitments (after the first drawn, following financial ratios shall maintain in the duration):
   i. Current ratio shall exceed (including) 100%.
   ii. Interest coverage ratio shall exceed (including) 4.
   iii. Debt ratio shall below (including) 100%.
   iv. Tangible net assets: shall exceed NTD 45 billion.
   Aforementioned ratios of financial commitment were calculated based on the audited annual consolidated financial statements which will be reviewed once a year. If the financial ratios were violated the restriction, the interest rate plus 0.15%. If the financial ratio were not improved in the continuous 2 periods, the facility shall be examined.

(17) <u>Pensions</u>

A. (a) The Company has a defined benefit pension plans in accordance with the Labor Standards Law, covering all regular employees for services provided prior to July 1, 2005, and employees who choose to remain in the defined benefit pension plan subsequent to the enforcement of the Labor Pension Act on July 1, 2005. Under the defined benefit pension plan, employees are entitled to two base points for every year of service for the first 15 years and one base point for each additional year thereafter, up to a maximum of 45 base points. The pension payment to employees is computed based on years of service and average salaries or wages of the last six months prior to approved retirement. The Company contributes an amount equal to 2% of salaries and wages paid each month to a pension fund. The pension fund is administered by a pension fund monitoring committee (the "Committee") and deposited under the Committee's name in the Bank of Taiwan.

Also, the Company would assess the balance in the aforementioned labor pension reserve account by the end of December 31, every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method, to the employees expected to be qualified for retirement next year, the Company will make contributions to cover the deficit by next March.

(b) The amounts recognized in the balance sheet are determined as follows:

	December 31, 2019	December 31, 2018
Present value of defined benefit obligations	($ 360,068)	($ 357,293)
Fair value of plan assets	280,240	257,354
Net defined benefit liability	($ 79,828)	($ 99,939)

(c) Movements in net defined benefit liabilities are as follows:

	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
2019			
Balance at January 1	($ 357,293)	$ 257,354	($ 99,939)
Current service cost	(1,424)	-	(1,424)
Interest (expense) income	(3,566)	2,628	(938)
Past service cost	5,159	-	5,159
Benefits paid	566	(566)	-
	(356,558)	259,416	(97,142)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	8,883	8,883
Change in demographic assumptions	(3,304)	-	(3,304)
Change in financial assumptions	(12,511)	-	(12,511)
Experience adjustments	12,305	-	12,305
	(3,510)	8,883	5,373
Pension fund contribution	-	11,941	11,941
Balance at December 31	($ 360,068)	$ 280,240	($ 79,828)

	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
2018			
Balance at January 1	($ 380,000)	$ 239,145	($ 140,855)
Current service cost	(1,750)	-	(1,750)
Interest (expense) income	(4,738)	3,064	(1,674)
Benefits paid	3,783	(3,783)	-
	(382,705)	238,426	(144,279)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	6,411	6,411
Change in demographic assumptions	(105)	-	(105)
Change in financial assumptions	(13,014)	-	(13,014)
Experience adjustments	38,531	-	38,531
	25,412	6,411	31,823
Pension fund contribution	-	12,517	12,517
Balance at December 31	($ 357,293)	$ 257,354	($ 99,939)

(d) The Bank of Taiwan was commissioned to manage the Fund of the Company's and domestic subsidiaries' defined benefit pension plan in accordance with the Fund's annual investment and utilisation plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilisation of the Labor Retirement Fund" (Article 6: The scope of utilisation for the Fund includes deposit in domestic or foreign financial institutions, investment in domestic or foreign listed, over-the-counter, or private placement equity securities, investment in domestic or foreign real estate securitization products, etc.). With regard to the utilisation of the Fund, its minimum earnings in the annual distributions on the final financial statements shall be no less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks. If the earnings is less than aforementioned rates, government shall make payment for the deficit after being authorized by the Regulator. The Company has no right to participate in managing and operating that fund and hence the Company is unable to disclose the classification of plan asset fair value in accordance with IAS 19 paragraph 142. The composition of fair value of plan assets as of December 31, 2019 and 2018 is given in the Annual Labor Retirement Fund Utilisation Report announced by the government.

(e) The principal actuarial assumptions used were as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Discount rate	0.75%	1.00%
Future salary increases	2.00%	2.00%

Future mortality rate was estimated separately based on the 5th Taiwan Standard Ordinary Experience Mortality Table.

Because the main actuarial assumption changed, the present value of defined benefit obligation is affected. The analysis was as follows:

	Discount rate		Future salary increases	
	Increase 25%	Decrease 25%	Increase 25%	Decrease 25%
December 31, 2019				
Effect on present value of defined benefit obligation	($ 12,483)	$ 13,079	$ 12,883	($ 12,363)
December 31, 2018				
Effect on present value of defined benefit obligation	($ 13,020)	$ 13,663	$ 13,492	($ 12,926)

The sensitivity analysis above is based on other conditions that are unchanged but only one assumption is changed. In practice, more than one assumption may change all at once. The method of analysing sensitivity and the method of calculating net pension liability in the balance sheet are the same.

The method and assumptions used for the preparation of sensitivity analysis during 2019 and during 2018 are the same.

(f) Expected contributions to the defined benefit pension plans of the Group for the next year amounts to $11,619.

(g) As of December 31, 2019, the weighted average duration of that retirement plan is 14 years.

B. (a) Effective July 1, 2005, the Company and its domestic subsidiaries have established a defined contribution pension plan (the "New Plan") under the Labor Pension Act (the "Act"), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company and its domestic subsidiaries contribute monthly an amount based on 6% of the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

(b) Episky Corporation (Xiamen) Ltd., EPISKY Corporation (Changzhou) LTD, Luxlite (Shenzhen) Corporation Limited, Epicrystal Corporation (Changzhou) Ltd., United LED Shandong Corporation, EPIRICH (Guangzhou) Co., Ltd, Jiangsu Canyang Optoelectronics Ltd. and Ningbo Formosa Epitaxy Incorporation have funded defined contribution plans. Monthly contributions to an independent fund administered by the government in accordance with the pension regulations in the People's Republic of China (PRC) are based on a certain percentage stipulated by the government. Other than the monthly contributions, these companies do not have further obligations.

(c) The pension costs under the defined contribution pension plans of the Group for the years ended December 31, 2019 and 2018 were $181,822 and $185,082, respectively.

(18) Share-based payment

A. For the years ended December 31, 2019 and 2018, the Group's share-based payment arrangements were as follows:

Type of arrangement	Grant date	Quantity granted (thousand shares)	Contract period	Vesting condition
Treasury stock Transferred to employees	2017.09.26	20,000	2 years	Note

Note: The Board of Directors adopted a resolution to transfer 20,000 thousand treasury stocks to employees with a subscription price of NT$26.9 and without transfer restriction during the meeting on September 26, 2017. If employees resign during the vesting period, they are obliged to compensate for the difference between closing market price and the subscription price on the date of security delivery which is under the discretion of the Chairperson.

B. For the years ended December 31, 2019 and 2018, the share-based payment arrangements of the Company's subsidiary, United LED Corporation (Hong Kong) Limited, are as follows:

Type of arrangement	Grant date	Quantity granted (thousand shares)	Vesting conditions
Employee stock option	2010.8.1	1,500,000	Note A

Note A: 30% upon completion of 1 year's service; 60% upon completion of 2 years' service; 100% upon completion of 3 years' service.

C. Details of the share-based payment arrangements are as follows:

	Year ended December 31, 2019		Year ended December 31, 2018	
	No.of shares (in thousands)	Weighted-average exercise price (in US dollars)	No.of shares (in thousands)	Weighted-average exercise price (in US dollars)
Options outstanding from beginning to the end of the period	1,048,700	$ 0.0001	1,048,700	$ 0.0001
Options exercisable at end of the period	1,048,700		1,048,700	

(19) Long-term deferred revenue (shown under "Other non-current liabilities")

	December 31, 2019	December 31, 2018
Government grants revenue	$ 445,956	$ 583,765
Deferred technical services revenue	12,307	16,266
	$ 458,263	$ 600,031

A. The Company's subsidiaries obtained government grants for acquisitions of equipment and technology investments and recognized such grants as revenue over the economic lives of those assets. Government grants revenue recognized for the years ended December 31, 2019 and 2018 were $174,876 and $146,935 (shown under "Other revenue"), respectively.

B. In 2009 and 2018, the Company signed a technical permission and technical support contract with Litefield Corporation (Dalian) LTD, and recognises technical services revenue over the contract periods. Technical services revenue recognised for the years ended December 31, 2019 and 2018 were $13,205 and $14,501, respectively.

(20) Share capital

A. As of December 31, 2019, the Company's authorized capital was $13,000,000, consisting of 1,300,000 thousand shares of ordinary stock (including 35,000 thousand shares reserved for employee stock options), and the paid-in capital was $10,887,014 with a par value of $10 (in dollars) per share. All proceeds from shares issued have been collected.

Movements of the Company's outstanding ordinary shares are as follows (expressed in thousands of shares):

	2019	2018
At January 1	1,083,051	1,075,836
Repurchase of treasury stocks	(4,715)	(3,085)
Treasury stocks transferred to employees	-	10,300
At December 31	1,078,336	1,083,051

B. Pursuant to the issuance of global depositary receipts (GDRs), the Company issued 135 million shares of common stocks for $1,350,000 thousand dollars. On September 22, 2009, the issuance of GDRs was completed and the GDRs are traded on the Luxembourg Stock Exchange. The total

GDRs issued were 27,000,000 units, each represented 5 common shares and USD $13 (in dollars) per unit, amounting to USD $351 million.

C. On October 1, 2018, the total operating assets and liabilities of iii-v semiconductors OEM business for spin-off and assignments to Unikorn Semiconductor Corporation were $1,000,000 and $0, respectively. Unikorn Semiconductor Corporation issued 100 million shares, at a price of $10 per share (par value of $5), to exchange the abovementioned assets and liabilities. The details are as follows:

Assets	October 1, 2018
Bank deposits	$ 360,172
Property, plant and equipment	639,828
	$ 1,000,000

D. Treasury shares

(a) Reason for share reacquisition and movements in the number of the Company's treasury shares are as follows:

Thousand shares/Thousand

	Year ended December 31, 2019				
Reason for reacquisition	Beginning balance	Increase	Decrease	Ending balance	Book value
Held by subsidiaries	2,565	-	-	2,565	$ 135,163
Held by the company	3,085	4,715	-	7,800	190,327

	Year ended December 31, 2018				
Reason for reacquisition	Beginning balance	Increase	Decrease	Ending balance	Book value
Held by subsidiaries	2,565	-	-	2,565	$ 135,163
Held by the company	-	3,085	-	3,085	75,845
To be reissued to employees	10,300	-	(10,300)	-	-

(b) Pursuant to the R.O.C. Securities and Exchange Act, the number of shares bought back as treasury share should not exceed 10% of the number of the Company's issued and outstanding shares and the amount bought back should not exceed the sum of retained earnings, paid-in capital in excess of par value and realised capital surplus.

(c) Pursuant to the R.O.C. Securities and Exchange Act, treasury shares should not be pledged as collateral and is not entitled to dividends before it is reissued.

(d) Pursuant to the R.O.C. Securities and Exchange Act, treasury shares should be reissued to the employees within three years from the reacquisition date and shares not reissued within the three-year period are to be retired. Treasury shares to enhance the Company's credit rating and the stockholders' equity should be retired within six months of acquisition.

E. Information of the Company's shares held by subsidiaries – Lighting Investment Corporation is as follows:

	December 31, 2019		December 31, 2018	
	Lighting Investment Corporation		Lighting Investment Corporation	
Shares	2,565 thousand shares		2,565 thousand shares	
Book value	$	135,163	$	135,163
Fair value	$	82,970	$	65,658

(21) Capital surplus

A. Pursuant to the Company Act, capital surplus, including additional paid-in capital in excess of par and donation, shall be exclusively used to cover accumulated deficit or to issue new stock or cash to shareholders in proportion to their ownership when the Company has no accumulated deficit. However, pursuant to the R.O.C. Securities and Exchange Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stock and donations can be capitalized once a year, provided that the Company has no accumulated deficit and the amount to be capitalized does not exceed 10% of the paid-in capital.

B. The shareholders resolved at their meeting on June 21, 2018 to issue cash to shareholders from capital surplus of $121,765.

C. The shareholders resolved at their meeting on June 20, 2019 to issue cash to shareholders from capital surplus of $324,270.

	Share premium	Treasury share transactions	Changes in ownership interests in subsidiaries	Difference between consideration and carrying amount of subsidiaries acquired or disposed	Change in net equity of associates and joint ventures accounted for under equity method
At January 1, 2019	$ 38,308,747	$ 195,387	$ 840,155	$ 105,198	$ 66,192
Capital surplus used to offset accumulated deficits	(324,270)	-	-	-	-
Treasury stocks transferred to employees	-	-	-	-	7,304
Changes in owner ship interest in subsidiaries accounted for using equity method	-	-	14,059	-	-
At December 31, 2019	$ 37,984,477	$ 195,387	$ 854,214	$ 105,198	$ 73,496

	Share premium	Treasury share transactions	Changes in ownership interests in subsidiaries	Difference between consideration and carrying amount of subsidiaries acquired or disposed	Change in net equity of associates and joint ventures accounted for under equity method	Employee restricted shares
At January 1, 2018	$ 38,430,512	$ 47,649	$ 834,683	$ 105,930	$ 524,287	$ 27,906
Capital surplus used to offset accumulated deficits	(121,765)	-	-	-	-	-
Net change in the equity of associates	-	-	-	-	(458,095)	-
Treasury stocks transferred to employees	-	145,686	-	-	-	(27,906)
Difference between consideration and carrying amount of subsidiaries acquired or disposed	-	-	-	(732)	-	-
Changes in owner ship interestet in subsidiaries accounted for using equity method	-	-	5,472	-	-	-
Capital surplus adjustment due to dividend paid to subsidiaries	-	2,052	-	-	-	-
At December 31, 2018	$ 38,308,747	$ 195,387	$ 840,155	$ 105,198	$ 66,192	$ -

(22) Unappropriated retained earnings (Accumulated deficit)

	2019	2018
At January 1	$ 479,888	$ 1,614,226
Effect of restrospective application and retrospective restatement	-	46,946
Profit loss for the year	(3,753,797)	(456,146)
Proceeds from disposal of financial assets at fair value through other comprehensive income	-	(1,071)
Remeasurement of defined benefit obligations	4,287	25,129
Appropriation of earnings	-	(749,196)
At December 31	($ 3,269,622)	$ 479,888

A. In accordance with the Company's Articles of Incorporation, 10% of current year's earnings, after paying all taxes and dues and covering prior years' losses, shall be appropriated as legal reserve until the total equals the issued share capital. Special reserve shall be appropriated or reversed when needed. The remaining earnings along with the prior years' accumulated unappropriated earnings are considered as distributable earnings, and shall be retained and appropriated in proportion to the number of shares held by each shareholder accordingly.

B. The Company appropriates earnings based on the factors such as current and future investment environment, capital needs, domestic and overseas competition and capital budget, along with the consideration of shareholders' interest and capital adequacy. The appropriation of cash dividends shall not be lower than 10% of the total dividend appropriated to shareholders.

C. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.

D. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the special reserve is reversed accordingly and could be included in the distributable earnings.

E. The earnings appropriation as resolved by the Board of Directors on June 21, 2018 is as follows:

	Year ended December 31, 2017	
	Amount	Dividends per share (in dollars)
Legal reserve	$ 161,423	$ -
Reversal of special reserve	703,607	-
Cash dividends	749,196	0.688156
	$ 1,614,226	

F. The appropriations of 2018 deficit had been resolved at the shareholders' meeting on June 20, 2019 that offset the deficits by special reserve amounting to $385,142.

G. For the information relating to employees' compensation (bonuses) and directors' and supervisors' remuneration, please refer to Note 6(30).

(23) Other equity items

	Currency translation differences	Unrealized gain or loss on available-for-sale financial assets	Total
At January 1, 2019	($ 818,175)	($ 499,815)	($ 1,317,990)
Revaluation - gross	388,784	-	388,784
Revaluation - tax	(70,757)	-	(70,757)
Disposal of investments accounted for using equity method	-	3,332	3,332
Currency translation			
–Group	-	(354,694)	(354,694)
–Tax on Group	-	70,939	70,939
–Associates	-	(6,374)	(6,374)
–Tax on associates	-	1,275	1,275
At December 31, 2019	($ 500,148)	($ 785,337)	($ 1,285,485)

	Currency translation differences	Unrealized gain or loss on available-for-sale financial assets	Total
At January 1, 2018	($ 268,293)	($ 415,950)	($ 684,243)
Effect of retrospective application and retrospective restatement	(52,055)	3,595	(48,460)
Revaluation - gross	(616,461)	-	(616,461)
Revaluation - tax	117,563	-	117,563
Revaluation transferred to retained earnings - gross	1,071	-	1,071
Disposal of investments accounted for using equity method	-	5,439	5,439
Currency translation			
–Group	-	(208,330)	(208,330)
–Tax on Group	-	63,311	63,311
–Associates	-	65,150	65,150
–Tax on associates	-	(13,030)	(13,030)
At December 31, 2018	($ 818,175)	($ 499,815)	($ 1,317,990)

(24) Operating revenue

	Year ended December 31, 2019	Year ended December 31, 2018
Revenue from contracts with customers:		
Sales revenue	$ 15,294,741	$ 19,449,635
Services revenue	605,073	831,243
Other operating revenue	60,017	25,534
	$ 15,959,831	$ 20,306,412

Disaggregation of revenue from contracts with customer

The Group derives revenue from the transfer of goods and services over time and at a point in time in the following major product lines and geographical regions:

2019	Epi	Chip	Other	Total
Sales revenue	$ 14,323,051	$ 170,297	$ 801,393	$ 15,294,741
Services revenue	-	-	605,073	605,073
Other operating revenue	-	-	60,017	60,017

2018	Epi	Chip	Other	Total
Sales revenue	$ 18,746,372	$ 209,844	$ 493,419	$ 19,449,635
Services revenue	-	-	831,243	831,243
Other operating revenue	-	-	25,534	25,534

(25) Other income and expenses– net

	Year ended December 31, 2019	Year ended December 31, 2018
Other income		
Royalty and technical income	$ 21,044	$ 39,286
Government grants revenue	236,485	181,663
Total	$ 257,529	$ 220,949

(26) Other income

	Year ended December 31, 2019	Year ended December 31, 2018
Interest income:		
Interest income from bank deposits	$ 45,637	$ 45,350
Net currency exchange (losses) gains	(9,940)	71,633
Other interest income	8,279	5,300
Total interest income	43,976	122,283
Rental revenue	115,538	75,795
Dividend income	29,330	13,940
Miscellaneous income	91,932	78,360
Total	$ 280,776	$ 290,378

(27) Other gains and losses

	Year ended December 31, 2019	Year ended December 31, 2018
Losses on disposal of property, plant and equipment	($ 1,031)	($ 113,219)
Gains (losses) on disposal of intangible assets	5,698	(141)
(Losses) gains on disposal of investments	(36,955)	310,915
Loss on disposal of non-current assets held for sale	(1,294)	-
Net currency exchange (losses) gains	(117,275)	41,456
Net gains on financial assets at fair value through profit or loss	319,276	12,382
Recognised in loss,non-current assets held for sale	(1,881)	(158,299)
Impairment loss on non-financial assets	(207,922)	(501,475)
Bargain purchase gains	160,110	-
Miscellaneous losses	(273,343)	(129,669)
Total	($ 154,617)	($ 538,050)

(28) Finance costs

	Year ended December 31, 2019	Year ended December 31, 2018
Interest expense:		
Bank borrowings	$ 129,486	$ 158,171
Net currency exchange losses (gains)	545	(9,739)
Other interest expense	30,240	28,001
	160,271	176,433
Less: capitalisation of qualifying assets	-	(755)
	$ 160,271	$ 175,678

(29) Expenses by nature

	Year ended December 31, 2019	Year ended December 31, 2018
Employee benefit expenses	$ 4,303,870	$ 4,516,886
Depreciation charges on property, plant and equipment (Note)	$ 4,856,814	$ 4,758,265
Amortisation charges on intangible assets	$ 260,469	$ 267,542

Note: Depreciation amounting to $152,875 and $75,051 were recognized as a deduction of rental revenue for the years ended December 31, 2019 and 2018, respectively.

(30) Employee benefit expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Wages and salaries	$ 3,614,649	$ 3,812,243
Labor and health insurance expenses	285,889	288,578
Pension costs	183,643	188,506
Other personnel expenses	219,689	227,559
	$ 4,303,870	$ 4,516,886

A. According to the Articles of Incorporation of the Company, the Company shall distribute employees' compensation and directors' remuneration based on 10%~20% and 2% of the distributable profit of the current year, respectively. If the Company has accumulated deficit, earnings should be reserved to cover losses.

The abovementioned distributable profit of the current year refers to the current year's income before tax (excluding put option, call option, conversion right and reacquisition of corporate bonds on overseas convertible bond that are recorded in other gains and losses) less the profit prior to the appropriation of employees' compensation and directors' remuneration.

B. The aforementioned amounts were recognised in salary expenses. For the years ended December 31, 2019 and 2018, the Company incurred loss and thus did not accrue employees' compensation and directors' and supervisors' remuneration. Information about employees' compensation and directors' and supervisors' remuneration of the Company as resolved by the Board of Directors will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(31) Income tax

A. Income tax expense (benefit)

(a) Components of income tax expense:

	Year ended December 31, 2019	Year ended December 31, 2018
Current tax:		
Current tax on profits for the year	$ 38,203	$ 59,998
Prior year income tax underestimation	(40,189)	18,853
Total current tax	(1,986)	78,851
Deferred tax:		
Origination and reversal of temporary differences	185,404	(165,016)
Effect from changes in tax regulation	-	(275,112)
Total deferred tax	185,404	(440,128)
Income tax expense (benefit)	$ 183,418	($ 361,277)

(b) The income tax (charge)/credit relating to components of other comprehensive income is as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Fair value unrealized gains/losses on available-for-sale financial assets	$ 70,756	($ 117,563)
Currency translation differences	(70,939)	(50,281)
Share of other comprehensive income of associates	(1,274)	-
Remeasurement of defined benefit obligations	1,074	6,365
Total	($ 383)	($ 161,479)

B. Reconciliation between income tax (benefit) expense and accounting profit:

	Year ended December 31, 2019	Year ended December 31, 2018
Tax calculated based on profit (losses) before tax and statutory tax rate	($ 750,820)	($ 141,122)
Effects from expenses disallowed and tax exempted income by tax regulation	15,198	18,707
Change in assessment of realisation of deferred tax assets	185,404	(165,016)
Taxable loss not recognised as deferred tax assets	672,090	182,413
Investment tax not recognised as deferred tax assets	101,735	-
Prior year income tax (over) underestimation	(40,189)	18,853
Effect from changes in tax regulation	-	(275,112)
Income tax expense (benefit)	$ 183,418	($ 361,277)

C. Amounts of deferred tax assets or liabilities as a result of temporary differences, tax losses and investment tax credit are as follows:

	2019			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets:				
－Temporary differences:				
Unrealized loss on inventory	$ 29,555	$ 64,471	$ -	$ 94,026
Unrealized exchange loss	-	21,435	-	21,435
Unrealized sales returns and discounts	38,338	(21,432)	-	16,906
Bad debt expense	4,036	(2,993)	-	1,043
Investment loss under equity method	561,842	233,344	-	795,186
Impairment loss for non-financial assets	43,101	-	-	43,101
Loss on valuation of financial assets	254,828	-	(137,908)	116,920
Impairment loss for financial assets	47	-	-	47
Deferred revenue	65,565	(6,291)	-	59,274
Currency translation differences	628,485	-	221,819	850,304
Unrealized pension	27,034	(1,832)	(1,074)	24,128
Others	183,689	(56,170)	-	127,519
Tax losses	1,954,622	(177,892)	-	1,776,730
Investment tax credit	119,990	(101,735)	-	18,255
Subtotal	$ 3,911,132	($ 49,095)	$ 82,837	$ 3,944,874
－Deferred tax liabilities:				
Unrealized exchange gain	($ 47)	$ 47	$ -	$ -
Unrealized gross profit	(17,157)	14,047	-	(3,110)
Bargain purchase gain	(22,670)	15,295	-	(7,375)
Investment gain under equity method	(532,707)	(31,356)	-	(564,063)
Gain on valuation of financial assets	(119,297)	-	60,515	(58,782)
Currency translation differences	(477,196)	-	(127,960)	(605,156)
Others	(233,827)	(134,342)	-	(368,169)
Subtotal	(1,402,901)	(136,309)	(67,445)	(1,606,655)
Total	$ 2,508,231	($ 185,404)	$ 15,392	$ 2,338,219

	2018			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets:				
—Temporary differences:				
Unrealized inventory loss	$ 25,156	$ 4,399	$ -	$ 29,555
Unrealized exchange loss	277	(277)	-	-
Unrealized sales returns and discounts	9,794	28,544	-	38,338
Bad debt expense	11,158	(7,122)	-	4,036
Unrealized loss from sales	4,949	(4,949)	-	-
Investment loss under equity method	513,745	48,097	-	561,842
Impairment loss for non-financial assets	103,733	(60,632)	-	43,101
Loss on valuation of financial assets	112,585	-	142,243	254,828
Impairment loss for financial assets	3,484	(3,437)	-	47
Deferred revenue	76,642	(11,077)	-	65,565
Currency translation differences	515,708	-	112,777	628,485
Unrealized pension	20,206	463	6,365	27,034
Others	9,169	174,520	-	183,689
Tax losses	1,494,734	459,888	-	1,954,622
Investment tax credit	119,990	-	-	119,990
Subtotal	3,021,330	628,417	261,385	3,911,132
—Deferred tax liabilities:				
Unrealized exchange gain	-	(47)	-	(47)
Unrealized gross profit	-	(17,157)	-	(17,157)
Bargain purchase gain	(36,272)	13,602	-	(22,670)
Investment gain under equity method	(516,341)	(16,366)	-	(532,707)
Gain on valuation of financial assets	(104,743)	-	(14,554)	(119,297)
Currency translation differences	(393,055)	-	(84,141)	(477,196)
Others	(47,386)	(186,441)	-	(233,827)
Subtotal	(1,097,797)	(206,409)	(98,695)	(1,402,901)
Total	$ 1,923,533	$ 422,008	$ 162,690	$ 2,508,231

D. Details of the amount the Group is entitled as investment tax credit and unrecognized deferred tax assets are as follows:

Unutilized tax losses from Company is as follows：

December 31, 2019			
Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Investment credit for stockholder	$ 499,950	$ 499,950	2020
Investment credit for stockholder	100,000	8,725	2021
Investment tax credits for industrial innovation	967,447	967,447	2020

December 31, 2018			
Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Investment credit for stockholder	$ 499,950	$ -	2020
Investment credit for stockholder	100,000	-	2021
Investment tax credits for industrial innovation	793,193	793,193	2019
Investment tax credits for industrial innovation	967,447	967,447	2020

Unutilized tax losses from the subsidiary is as follows:

December 31, 2019			
Qualifying items	Unused tax credits	Unrecognised deferred tax assets	Expiry year
Investment tax credits for industrial innovation	$ 25,608	$ 25,608	2020

E. Expiration dates of unused tax losses and amounts of unrecognized deferred tax assets are as follows:

Unutilized tax losses from the Company is as follow：

December 31, 2019				
Year incurred	Amount filed / assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2014	Assessed	$ 3,948,345	$ 3,948,345	2024
2015	Assessed	1,048,267	4,990	2025
2016	Assessed	3,408,870	-	2026
2018	Filed	852,051	-	2028
2019	Filed	3,375,698	-	2029

December 31, 2018				
Year incurred	Amount filed / assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2014	Assessed	$ 3,948,345	$ -	2024
2015	Assessed	1,048,266	-	2025
2016	Assessed	3,408,870	-	2026
2018	Field	852,051	-	2028

Unutilized tax losses from the subsidiary is as follows:

December 31, 2019				
Year incurred	Amount filed / assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2011	Assessed	$ 2,095	$ 2,095	2021
2012	Assessed	46,635	46,635	2022
2013	Assessed	8,487	8,487	2023
2014	Assessed	19,810	19,810	2024
2015	Filed	447,720	447,720	2020
2015	Assessed	9,427	9,427	2025
2016	Filed	590,727	590,727	2026
2016	Assessed	146,835	146,835	2021
2017	Assessed	155,463	155,463	2027
2017	Assessed	41,066	41,066	2027
2018	Filed	60,356	60,356	2028

December 31, 2018				
Year incurred	Amount filed / assessed	Unused amount	Unrecognised deferred tax assets	Expiry year
2011	Assessed	$ 1,166	$ 1,166	2021
2012	Assessed	46,635	46,635	2022
2013	Filed	369,062	369,062	2023
2014	Filed	460,286	460,286	2019
2014	Assessed	19,810	19,810	2024
2015	Filed	470,249	465,088	2020
2015	Assessed	9,427	9,427	2025
2016	Filed	613,643	613,643	2021
2016	Assessed	146,835	146,835	2026
2017	Filed	155,454	155,454	2027

F. The amounts of deductible temporary difference that are not recognized as deferred tax assets are as follows: None.

G. The Company's products qualify for "Regulations for Encouraging Manufacturing Enterprises and Technical Service Enterprises in the Newly Emerging, Important and Strategic Industries" and the Company is entitled to the income tax exemption for five consecutive years. The duration has been set to start from January 1, 2017.

H. The Company's income tax returns through 2017 have been assessed and approved by the Tax Authority.

I. Under the amendments to the Income Tax Act which was promulgated by the President of the Republic of China on February 7, 2018, the Company's applicable income tax rate was raised from 17% to 20% effective from January 1, 2018. The Company has assessed the impact of the change in income tax rate.

(32) Losses per share

	Year ended December 31, 2019		
	Amount after tax	Weighted average number of outstanding ordinary shares (share in thousands)	Losses per share (in dollars)
Basic losses per share			
Losses attributable to the parent	($ 3,753,797)	1,078,425	($ 3.48)

	Year ended December 31, 2018		
	Amount after tax	Weighted average number of outstanding ordinary shares (share in thousands)	Losses per share (in dollars)
Basic losses per share			
Losses attributable to the parent	($ 456,146)	1,084,686	($ 0.42)

(33) Business combinations

A. On April 11, 2019, the Group acquired 52.6% of the share capital of Prolight Opto Technology Company for $104,600 thousand dollars and obtained the control over Prolight Opto Technology Company. As a result of the acquisition, the Group is expected to increase its presence in these markets. It also expects to reduce costs through economies of scale.

B. The following table summarises the consideration paid for Prolight Opto Technology Company and the fair values of the assets acquired and liabilities assumed at the acquisition date, as well as the fair value of the non-controlling interest at the acquisition date:

	April 11, 2019
Purchase consideration	
Cash paid	$ 104,600
Fair value of equity interest in Prolight Opto Technology Company held before the business combination	307,809
Fair value of the non-controlling interest	515,919
	928,328
Fair value of the identifiable assets acquired and liabilities assumed	
Cash	265,017
Notes receivable	25,829
Accounts receivable	170,038
Other receivables	8,043
Inventories	76,874
Other current assets	23,099
Property, plant and equipment	743,178
Intangible assets	484
Other non-current asset	74,560
Notes payable	(2,374)
Accounts payable	(98,616)

	April 11, 2019
Other payables	(56,818)
Other current liabilities	(18,328)
Long-term borrowings	(121,563)
Other non-current liabilities	(985)
Total identifiable net assets	1,088,438
Bargain purchase gains	($ 160,110)

C. Non-controlling interests are measured at the present ownership instruments' proportionate share in the recognised amounts of the acquiree's identifiable assets.

D. The Group recognised loss of $66,847 as a result of measuring at fair value its 40.2% equity interest in Prolight Opto Technology Company held before the business combination.

E. The business combination had a gain from bargain purchase amounting to $160,110 because the carrying amounts of acquiree's property and plant were lower than their fair values.

F. The operating revenue included in the consolidated statement of comprehensive income since April 11, 2019 contributed by Prolight Opto Technology Company was $419,377. Prolight Opto Technology Company also contributed profit before income tax of $25,422 over the same period. Had Prolight Opto Technology Company been consolidated from January 1, 2019, the consolidated statement of comprehensive income would show operating revenue of $16,090,141 and profit before income tax of $3,768,793.

(34) Supplemental cash flow information

A. Investing activities with partial cash payments

	Year ended December 31, 2019	Year ended December 31, 2018
Purchase of property, plant and equipment	$ 2,489,724	$ 3,606,868
Add: Opening balance of payable on equipment	1,153,185	848,963
Add: Ending balance of prepayment for equipment	144,179	214,939
Less: Ending balance of payable on equipment	(545,544)	(1,153,185)
Less: Opening balance of prepayment for equipment	(214,939)	(349,388)
Less:Payable on equipment transferred to other income	(44,133)	-
Cash paid during the year	$ 2,982,472	$ 3,168,197

Intangible assets:

	Year ended December 31, 2019	Year ended December 31, 2018
Purchase of intangible assets	$ 73,225	$ 96,142
Add: Opening balance of payables	142,218	177,597
Less: Ending balance of payables	(94,525)	(142,218)
Cash paid during the year	$ 120,918	$ 131,521

B. Partial cash investing activities

	Year ended December 31, 2019	Year ended December 31, 2018
Sale of property, plant and equipment	$ 191,537	$ 74,395
Add: Opening balance of receivables	2,704	4,581
Less: Ending balance of receivables	(2,000)	(2,704)
Cash collected during the period	$ 192,241	$ 76,272

C. Cash received from disposal of ownership interests in subsidiaries

	Year ended December 31, 2019	Year ended December 31, 2018
Disposal proceeds	$ -	$ 212,757
Add: Opening balance of receivables	17,093	77,400
Less: Ending balance of receivables	(17,093)	(17,093)
Net cash provided by disposal of subsidiaries	$ -	$ 273,064

D. Financing activities with partial cash

	Year ended December 31, 2019	Year ended December 31, 2018
Treasury shares reissued to employees	$ -	$ 391,400
Less: Shown as 'Other receivables'	-	(104,503)
Cash collected in the year	$ -	$ 286,897

(35) Changes in liabilities from financing activities

	Short-term borrowing	Long-term borrowing	Short-term notes and bills payable	Lease liabilities	Guarantee deposits received	Liabilities from financing activities gross
At January 1, 2019	$ 1,874,876	$ 575,114	$ 357,717	$ 1,441,297	$ 70,444	$ 4,319,448
Acquired from business combinations	-	121,563	-	-	-	121,563
Changes in cash flow from financing activities	(133,587)	431,881	2,035	(141,969)	(5,790)	152,570
Effect of interest	-	-	-	27,992	-	27,992
Additions	-	-	-	46,136	-	46,136
Effect of exchange rate changes in borrowings	1,105	-	-	-	-	1,105
Effect of exchange rate	(58,611)	-	(13,434)	(2,007)	(2,284)	(76,336)
At December 31, 2019	$ 1,683,783	$ 1,128,558	$ 346,318	$ 1,371,449	$ 62,370	$ 4,592,478

	Short-term borrowing	Long-term borrowing	Short-term notes and bills payable	Guarantee deposits received	Liabilities from financing activities gross
At January 1, 2018	$ 700,000	$ 3,098,136	$ 376,791	$ 49,501	$ 3,798,136
Changes in cash flow from financing activities	1,203,014	(2,533,038)	(11,614)	22,251	(1,330,024)
Effect of exchange rate changes in borrowings	(1,105)	634	-	-	(471)
Effect of exchange rate	(27,033)	(812)	(7,460)	(1,308)	(27,845)
Amortisation of borrowings cost	-	10,194	-	-	10,194
At December 31, 2018	$ 1,874,876	$ 575,114	$ 357,717	$ 70,444	$ 2,449,990

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

Names of related parties	Relationship with the Group
Everlight Electronics Co., Ltd. and its subsidiaries	Other related parties (Note 6)
Seoul Semiconductor Co., Ltd.	Other related parties
Seoul Viosys Co. ,Ltd.	Other related parties
Country Lighting(BVI) Co., Ltd.	Associates
ES -LEDRU LLC.	Associates
LEDOLUX Sp. Zo. O.	Associates
LEDAZ Co., Ltd.	Associates
Interlight Optotech (HK) CO., Limited	Associates
Nan Ya Photonics Incorporation	Associates
Tekcore Co., Ltd.	Associates
TE Opto Corporation	Associates
Very Optoelectronics (HUI ZHOU) Co., Ltd	Associates (Note 1)
PlayNitride Inc.	Associates (Note 2)
Tops Electrical Technology Co., Ltd.	Associates (Note 3)
KAISTAR Lighting (Xiamen) Co., Ltd.	Associates (Note 4)
ProLight Opto Technology Corporation	Note 5

Note 1: It is no longer the Company's other related party beginning on March 14, 2018.
Note 2: It is no longer the Company's other related party beginning on March 6, 2018.
Note 3: It is no longer the Company's other related party beginning on March 29, 2018.
Note 4: It is no longer the Company's other related party beginning on April 26, 2018.
Note 5: It is no longer the Company's other related party beginning on April 11, 2019.
Note 6: It is no longer the Company's other related party beginning on June 20, 2019.

(2) Significant related party transactions and balances

A. Operating revenue:

	Year ended December 31, 2019	Year ended December 31, 2018
Other related parties		
Everlight Electronics Co., Ltd and its subsidiaries	$ 633,080	$ 1,716,675
Others	79,143	251,975
Subtotal	712,223	1,968,650
Associates	438,292	1,233,180
Total	$ 1,150,515	$ 3,201,830

The sales price and collection terms to related parties are generally comparable to those of third parties which is 150 days after month-end closing. Additionally, the sales price offered to certain related parties is not comparable to third parties since there is no such transaction with third parties. All other sales prices to related parties are the same as those to third parties.

B. Purchases:

	Year ended December 31, 2019	Year ended December 31, 2018
Associates		
KAISTAR Lighting (Xiamen) Co.,Ltd	$ -	$ 209,703
Others	16,847	80,353
	$ 16,847	$ 290,056

Due to the product variety, the purchase price from the above related parties was not comparable to other suppliers while other products have no difference with market price.

C. Receivables from related parties:

	December 31, 2019	December 31, 2018
Accounts receivable:		
Other related parties		
Everlight Electronics Co., Ltd. and its subsidiaries	$ -	$ 924,489
Others	788	44,515
Subtotal	788	969,004
Associates		
Others	171,397	312,002
Subtotal	171,397	312,002
Total	$ 172,185	$ 1,281,006

The receivables from related parties arise mainly from sale transactions. The receivables are unsecured in nature and bear no interest.

D. Other receivables from related parties:

	December 31, 2019	December 31, 2018
Associates	$ 204	$ 305

The other receivables from related parties arise mainly from sales of machinery and equipment and patent licensing transactions.

E. Payables from related parties:

	December 31, 2019	December 31, 2018
Accounts payable:		
Associates	$ 151,677	$ 285,825

The payables to related parties arise mainly from purchase transactions. The payables bear no interest.

F. Property transactions:

(a) Purchase of machinery and equipment

	Year ended December 31, 2019	Year ended December 31, 2018
Other related parties	$ 111	$ -
Associates	22,093	390
	$ 22,204	$ 390

(b) Disposal of property, plant and equipment

	Year ended December 31, 2019		Year ended December 31, 2018	
	Sales price	Gain of disposal	Sales price	Gain of disposal
Associates	$ 132	$ 132	$ 1,836	($ 98)

(3) Key management compensation

	Year ended December 31, 2019	Year ended December 31, 2018
Salaries and other short-term employee benefits	$ 136,356	$ 127,237
Share-based payment	2,561	1,991
Termination benefits	32	-
Total	$ 138,949	$ 129,228

8. PLEDGED ASSETS

The Group's assets pledged as collateral are as follows: (The time deposits described below are recognized as other current assets - non-cash equivalents)

	Book value		
Pledgrd assets	December 31, 2019	December 31, 2018	Purpose
Bank deposits (shown in "Other assets-other")	$ 150,912	$ 280,663	Payables for bankers' acceptance
Bank deposits (Shown in "Other assets-other")	105,149	145,446	Lease deposit, customer deposit, Collateral deposits for provisional seizure
Notes receivable	404,867	44,720	
Buildings and structures	782,092	577,376	Long-term borrowings
Machinery and equipment and office equipment	82,129	-	Long-term borrowings
	$ 1,525,149	$ 1,048,205	

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT COMMITMENTS

A. Capital expenditure contracted for at the balance sheet date but not yet incurred is as follows:

	December 31, 2019	December 31, 2018
Contracted but not provided		
Property, plant and equipment	$ 779,777	$ 1,501,681

B. Operating lease commitments

Effective 2018

The Group's operating lease contracts for land, factories, dorms and automobiles are irrevocable and most of them can be renewed at market price at the end of the lease term.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	December 31, 2018
Not later than one year	$ 94,706
Later than one year but not later than five years	263,156
Later than five years	473,164
Total	$ 831,026

C. On October 12, 2012, the Trustees of Boston University filed a lawsuit against the Company, alleging patent infringement. In November 2015, the verdict of a Massachusetts federal jury for the first instance stated that the Company shall pay compensation of US$9.3 million. However, the Company won the verdict from the United States Court of Appeals for the Federal Circuit that stated in the second instance that the alleging patent infringement is invalid on July 25, 2018.

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

None.

12. OTHERS

(1) Capital risk management

The Group's capital management policy is established taking into account the industry characteristics, the Group's future development and changes in external environments. The Group plans the working capital, capital expenditures, investments and dividends required for the future based on the capital management policy, makes financial analysis, and examines its capital structure periodically and makes appropriate adjustments to ensure that every company within the Group may grow and operate indefinitely.

(2) Financial instruments

A Financial instruments by category

	December 31, 2019	December 31, 2018
Financial assets		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	$ 1,342,977	$ 726,406
Financial assets at fair value through other comprehensive income	3,640,610	3,265,125
Designation of equity instrument		
Financial assets at amortised cost		
Cash and cash equivalents	5,252,823	5,532,509
Notes receivable	2,313,351	1,495,653
Accounts receivable	6,705,598	7,583,934
Accounts receivable due from related parties	172,185	1,281,006
Other receivables	145,596	249,964
Other receivables due from related parties	204	305
Guarantee deposits paid	11,993	98,675
Other financial assets	282,763	428,380
	$ 19,868,100	$ 20,661,957

	December 31, 2019	December 31, 2018
Financial liabilities		
Financial liabilities at amortised cost		
Short-term borrowings	$ 1,683,783	$ 1,874,876
Short-term notes payable	346,318	357,717
Notes payable	394,586	129,942
Accounts payable	1,534,323	2,301,209
Accounts payable to related parties	151,677	285,825
Other payables	2,503,852	3,820,103
Lease liabilities (including current portion)	1,371,449	-
Long-term borrowings (including current portion)	1,128,558	575,114
Long-term accounts payable	47,365	95,059
Guarantee deposits received	62,370	70,444
	$ 9,224,281	$ 9,510,289

B. Financial risk management policies

(a) The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The purpose of risk management is to minimise potential adverse effects arising from uncertainty on the Group's financial performance.

(b) Risk management is carried out by treasury and finance departments of the Company under policies approved by the Board of Directors. Treasury and finance departments of the Company identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The Board provides written principles for overall risk management, as well as written policies covering specific areas and matters, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

i. The Group operates internationally and is exposed to exchange rate risk arising from the transactions of the Company and its subsidiaries used in various functional currency, primarily with respect to the USD, JPY and RMB. Exchange rate risk arises from future commercial transactions and recognised assets and liabilities.

ii. Management has set up a policy to require the Group to manage their foreign exchange risk against their functional currency. The companies are required to hedge their entire foreign exchange risk exposure with the Company treasury.

iii. The Group's businesses involve some non-functional currency operations (the functional currency of the Company and certain subsidiaries is NTD while that of other subsidiaries are USD and RMB). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

	December 31, 2019				
	Foreign currency amount (in Thousands)		Exchange rate	Book value (in Thousands of NTD)	
(Foreign currency: functional currency)					
Financial assets					
Monetary items					
USD:NTD	$	157,972	29.980	$	4,735,998
RMB:NTD		526,647	4.3050		2,267,213
Non-monetary items					
USD:NTD		103,103	29.980		3,091,017
Financial liabilities					
Monetary items					
USD:NTD		46,807	29.980		1,403,273
RMB:NTD		238,302	4.3050		1,025,891

	December 31, 2018				
	Foreign currency amount (in Thousands)		Exchange rate	Book value (in Thousands of NTD)	
(Foreign currency: functional currency)					
Financial assets					
Monetary items					
USD:NTD	$	181,169	30.715	$	5,564,607
RMB:NTD		527,598	4.4720		2,359,418
Non-monetary items					
USD:NTD		103,103	30.715		3,166,821
Financial liabilities					
Monetary items					
USD:NTD		82,933	30.715		2,547,277
RMB:NTD		156,520	4.472		699,960

iv. Please refer to the following table for the details of unrealized exchange gain (loss) arising from significant foreign exchange variation on the monetary items held by the Group.

	Year ended December 31, 2019		
	Unrealized exchange gain (loss)		
	Foreign currency amount (in Thousands)	Exchange rate	Book value (in Thousands of NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ -	29.980	($ 114,512)
RMB:NTD	-	4.3050	(52,515)
Financial liabilities			
Monetary items			
USD:NTD	-	29.980	30,328
RMB:NTD	-	4.3050	12,842

	Year ended December 31, 2018		
	Unrealized exchange gain (loss)		
	Foreign currency amount (in Thousands)	Exchange rate	Book value (in Thousands of NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ -	30.715	$ 4,294
RMB:NTD	-	4.4720	(12,068)
Financial liabilities			
Monetary items			
USD:NTD	-	30.715	7,718
RMB:NTD	-	4.4720	1,507

v. Analysis of foreign currency market risk arising from significant foreign exchange rariation:

	Year ended December 31, 2019		
	Sensitivity analysis		
	Extent of variation	Effect on profit or loss	Effect on equity
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 47,360	$ -
RMB:NTD	1%	22,672	-
Non-monetary items			
USD:NTD	1%	-	30,910
Financial liabilities			
Monetary items			
USD:NTD	1%	14,033	-
RMB:NTD	1%	10,259	-

	Year ended December 31, 2018		
	Sensitivity analysis		
	Extent of variation	Effect on profit or loss	Effect on equity
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	1%	$ 55,646	$ -
RMB:NTD	1%	23,594	-
Non-monetary items			
USD:NTD	1%	-	31,668
Financial liabilities			
Monetary items			
USD:NTD	1%	25,473	-
RMB:NTD	1%	7,000	-

Price risk

i. The Group’s equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income. To manage its price risk arising from investments in equity securities, the Group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Group.

ii. The Group’s investments in equity securities comprise shares and open-end funds issued by the domestic companies. The prices of equity securities would change due to the change of the future value of investee companies. If the prices of these equity securities had increased/decreased by 10% with all other variables held constant, post-tax profit for the years ended December 31, 2019 and 2018 would have increased/decreased by $134,298 and $72,641, respectively, as a result of gains/losses on equity securities classified as at fair value through profit or loss. Other components of equity would have increased/decreased by$364,061 and $326,513, respectively, as a result of other comprehensive income classified as equity investment at fair value through other comprehensive income.

Interest rate risk

i. The Group's interest rate risk arises from bank deposits and long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash and cash equivalents held at variable rates. Borrowings issued at fixed rates expose the Group to fair value interest rate risk. The Group's borrowings at variable rate were denominated in the USD, RMB and NTD.

ii. Based on the simulations performed on sensitivity analysis for interest rate risk, the maximum impact on post-tax profit of a 0.1% shift would be increased/decreased of $1,798 and $111 for the years ended December 31, 2019 and 2018, respectively. The simulation is done on a quarterly basis to ensure that the potential maximum loss is within the limit set by the management.

(b) Credit risk

i. Credit risk refers to the risk of financial loss to the Group arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the contract cash flows of debt instruments stated at amortised cost, at fair value through profit or loss and at fair value through other comprehensive income.

ii. The Group adopts the assumptions under IFRS 9, the default occurs when the contract payments are past due over 90 days.

iii. The Group adopts following assumptions under IFRS 9 to assess whether there has been a significant increase in credit risk on that instrument since initial recognition: If the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition.

iv. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:

(i) It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;

(ii) The disappearance of an active market for that financial asset because of financial difficulties;

(iii) Default or delinquency in interest or principal repayments;

(iv) Adverse changes in national or regional economic conditions that are expected to cause a default.

v. The Group classifies customers' accounts receivable, contract assets and rents receivable in accordance with credit rating of customer. The Group applies the simplified approach using provision matrix, loss rate methodology to estimate expected credit loss under the provision matrix basis.

vi. The Group wrote-off the financial assets, which cannot be reasonably expected to be recovered, after initiating recourse procedures. However, the Group will continue executing the recourse procedures to secure their rights. As of December 31, 2019 and 2018, the Group's written-off financial assets that are still under recourse procedures amounted to $16,735 and $16,753, respectively.

vii. The Group used the forecast ability of Taiwan Institute of Economic Research boom observation report to adjust historical and timely information to assess the default possibility of accounts receivable and other receivables. As of December 31, 2019 and 2018, the provision matrix, loss rate methodology is as follows:

	Not past due	Up to 30 days past due	31~90 days past due	91~180 days past due	Over 180 days past due	Total
December 31, 2019						
Expected loss rate	0.01%~1%	0.01%~5%	0.01%~56%	0.01%~100%	0.01%~100%	
Total book value	$ 8,495,010	$ 452,363	$ 271,080	$ 38,248	$ 114,031	$ 9,370,732
Loss allowance	$ 993	$ 153	$ 229	$ 290	$ 32,132	$ 33,797

	Not past due	Up to 30 days past due	31~90 days past due	91~180 days past due	Over 180 days past due	Total
December 31, 2018						
Expected loss rate	0.02%~1%	0.01%~3%	0.01%~56%	0.01%~100%	0.01%~100%	
Total book value	$ 9,230,578	$ 556,189	$ 671,379	$ 164,827	$ 46,797	$ 10,669,770
Loss allowance	$ 1,779	$ 968	$ 6,637	$ 13,959	$ 35,565	$ 58,908

	Individual provision	Group provision	Total
December 31, 2019			
Expected loss rate	100%	0.01%~100%	
Total book value	$ 23,353	$ 9,347,379	$ 9,370,732
Loss allowance	$ 23,353	$ 10,444	$ 33,797

	Individual provision	Group provision	Total
December 31, 2018			
Expected loss rate	100%	0.01%~100%	
Total book value	$ 34,041	$ 10,635,729	$ 10,669,770
Loss allowance	$ 34,041	$ 24,867	$ 58,908

vii. Movements in relation to the Company applying the simplified approach to provide loss allowance for accounts receivable, and other receivables are as follows:

	Year ended December 31, 2019	
	Accounts receivable	Other receivables
At January 1	$ 42,838	$ 16,070
Acquired from business	5,155	-
Provision for impairment	40,396	10,553
Reversal of impairment	(65,347)	(3,498)
Write-offs	(12,018)	-
Effect of exchange rate changes	(352)	-
At December 31	$ 10,672	$ 23,125

	Year ended December 31, 2018	
	Accounts receivable	Other receivables
At January 1_IAS 39	$ 113,138	$ 20,270
Adjustments for retrospective application of IFRS9	12,993	-
At January 1_IFRS 9	126,131	20,270
Provision for impairment	25,718	79
Reversal of impairment	(15,904)	(4,200)
Write-offs	(92,944)	(79)
Effect of exchange rate changes	(163)	-
At December 31	$ 42,838	$ 16,070

(c) Liquidity risk

i. Cash flow forecasting is performed in the operating entities of the Group and aggregated by Group treasury. Group treasury monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets and external regulatory or legal requirements.

ii. Surplus cash are invested in interest bearing current accounts, time deposits, money market deposits and marketable securities, with appropriate maturities or sufficient liquidity to provide sufficient headroom and meet the above-mentioned forecasts. As of December 31, 2019 and 2018, the Group held money market position of $6,595,800 and $6,258,915, respectively, and those are expected to readily generate cash inflows for managing liquidity risk.

iii. The table below shows analysis of the Group's non-derivative financial liabilities and net-settled or gross-settled derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities and to the expected maturity date for derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

Non-derivative financial liabilities: December 31, 2019	Less than 1 year	Between 1 and 5 years	Between 5 and 7 years	Over 7 years
Short-term borrowings	$ 1,683,783	$ -	$ -	$ -
Short-term notes and bills payable	346,318	-	-	-
Notes payable	394,586	-	-	-
Accounts payable to related parties	1,686,000	-	-	-
Other payables	2,503,852	-	-	-
Lease liabilities	98,710	296,695	120,571	1,212,735
Long-term borrowings (including current portion)	118,528	1,040,966	-	-
Long-term accounts payable (including current portion)	-	47,365	-	-
Other financial liabilities	61,837	-	533	-

Non-derivative financial liabilities: December 31, 2018	Less than 1 year	Between 1 and 5 years	Between 5 and 7 years	Over 7 years
Short-term borrowings	$ 1,847,876	$ -	$ -	$ -
Short-term notes and bills payable	357,717	-	-	-
Notes payable	129,942	-	-	-
Accounts payable	2,587,043	-	-	-
Other payables	3,820,103	-	-	-
Long-term borrowings (including current portion)	171,144	414,535	-	-
Long-term accounts payable (including current portion)	-	95,059	-	-
Other financial liabilities	69,149	762	-	533

iv. The Group does not expect the timing of the estimated cash outflows through the maturity date analysis will be significantly earlier, nor expect the actual cash flow amount will be significantly different.

(3) Fair value information

A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Group's investment in listed stocks and beneficiary certificates is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. The fair value of the Group's investment in convertible bonds and most derivative instruments is included in Level 2.

Level 3: Unobservable inputs for the asset or liability. The fair value of the Group's investment in equity investment without active market is included in Level 3.

B. Financial instruments not measured at fair value

(a) Except for those listed in the table below, the carrying amounts of cash and cash equivalents, notes receivable, accounts receivable, other receivables, refundable deposits, other financial assets, short-term borrowings, short-term notes and bills payable, notes payable, accounts payable, other payables, long-term accounts payable and guarantee deposits received are approximate to their fair values.

	December 31, 2019			
		Fair value		
	Book value	Level 1	Level 2	Level 3
Financial liabilities:				
Long-term borrowings				
(including current portion)	$ 1,128,558	$ -	$ 1,143,502	$ -

	December 31, 2018			
		Fair value		
	Book value	Level 1	Level 2	Level 3
Financial liabilities:				
Long-term borrowings				
(including current portion)	$ 575,114	$ -	$ 577,226	$ -

(b) The methods and assumptions of fair value estimate are as follows:

Long-term borrowings: They are measured at present value, which is calculated based on the cash flow expected to be paid and discounted using a market rate prevailing at balance sheet date.

C. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities at December 31, 2019 and 2018 is as follows:

(a) The related information of natures of the assets and liabilities is as follows:

December 31, 2019	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Equity securities	$ 1,142,619	$ 66	$ 157,762	$ 1,300,447
Beneficiary certificates	42,530	-	-	42,530
Available-for-sale financial assets				
Equity securities	326,818	5,686	3,308,106	3,640,610
Total	$ 1,511,967	$ 5,752	$ 3,465,868	$ 4,983,587

December 31, 2018	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
Equity securities	$ 352,103	$ 7,689	$ -	$ 359,792
Beneficiary certificates	366,614	-	-	366,614
Available-for-sale financial assets				
Equity securities	335,631	9,502	2,919,992	3,265,125
Total	$ 1,054,348	$ 17,191	$ 2,919,992	$ 3,991,531

(b) The methods and assumptions the Group used to measure fair value are as follows:

i. The instruments the Group used market quoted prices as their fair values (that is, Level 1) are listed below by characteristics:

	Listed shares	Closed-end fund	Open-end fund
Market quoted price	Closing price	Closing price	Net asset value

ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques or by reference to counterparty quotes. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the consolidated balance sheet date.

iii. When assessing non-standard and low-complexity financial instruments, for example, debt instruments without active market and foreign exchange swap contracts, the Group adopts valuation technique that is widely used by market participants. The inputs used in the valuation method to measure these financial instruments are normally observable in the market.

iv. For high-complexity financial instruments, the fair value is measured by using self-developed valuation model based on the valuation method and technique widely used within the same industry. The valuation model is normally applied to derivative financial instruments, debt instruments with embedded derivatives or securitised instruments. Certain inputs used in the valuation model are not observable at market, and the Group must make reasonable estimates based on its assumptions. The effect of unobservable inputs to the valuation of financial instruments is provided in Note 12(3)A.

v. The output of valuation model is an estimated value and the valuation technique may not be able to capture all relevant factors of the Group's financial and non-financial instruments. Therefore, the estimated value derived using valuation model is adjusted accordingly with additional inputs, for example, model risk or liquidity risk and etc. In accordance with the Group's management policies and relevant control procedures relating to the valuation models used for fair value measurement, management believes adjustment to valuation is necessary in order to reasonably represent the fair value of financial and non-financial instruments at the consolidated balance sheet. The inputs and pricing information used during valuation are carefully assessed and adjusted based on current market conditions.

(c) The following chart is the movement of Level 3 for the years ended December 31, 2019 and 2018:

	Equity securities
At January 1, 2019	$ 2,919,992
Gain recognised in profit or loss	136,389
Loss recognised in other comprehensive income	334,027
Disposals in the year	(23,903)
Additions	99,363
At December 31, 2019	$ 3,465,868

	Equity securities
At January 1, 2018	$ 1,602,311
Gain recognised in profit or loss	(232)
Loss recognised in other comprehensive income	(617,120)
Disposals in the year	(12,923)
Additions	46,616
Transfers into level 3	1,901,340
At December 31, 2018	$ 2,919,992

D. The Company lost significant influence over PlayNitride Inc. and KAISTAR Lighting (Xiamen) Co., Ltd. as their shares owned by the Company were less than 20% as at March 6, 2018 and April 26, 2018, respectively. Therefore, the Company reclassified them into financial assets at fair value through other comprehensive income in accordance with IFRSs. Additionally, the Company transferred the fair values into Level 3 as there is insufficient observable market information.

E. Because the stocks of Lustrous Technology, Ltd. is no longer publicly traded since March 1, 2017, and there is insufficient observable market information, the Company has transferred the fair value from Level 2 into Level 3.

F. Treasury department is in charge of valuation procedures for fair value measurements being categorised within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, and frequently calibrating valuation model, performing back-testing, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

G. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2019	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	$ 2,459,259	Market comparable companies	Price to book ratio multiple	0.79~2.96	The higher the multiple, the higher the fair value.
			Discount for lack of marketability	20%~30%	The higher the discount for lack of marketability, the lower the fair value.
Unlisted shares	791,211	Market comparable companies	Price to earnings ratio multiple	16.83~17.50	The higher the multiple, the higher the fair value.
			Discount for lack of marketability	20%	The higher the discount for lack of marketability, the lower the fair value.
Unlisted shares	215,398	Market comparable companies	Enterprise value to operating income ratio multiple	2.57	The higher the multiple value, the higher the fair value.
			Discount for lack of marketability	20%	The higher the discount for lack of marketability, the lower the fair value.

	Fair value at December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	$ 2,402,469	Market comparable companies	Price to book ratio multiple	0.45~2.71	The higher the multiple, the higher the fair value.
			Discount for lack of marketability	20%~30%	The higher the discount for lack of marketability, the lower the fair value.
Unlisted shares	465,131	Market comparable companies	Price to earnings ratio multiple	19.30~19.39	The higher the multiple, the higher the fair value.
			Discount for lack of marketability	20%	The higher the discount for lack of marketability, the lower the fair value.
Unlisted shares	52,392	Market comparable companies	Enterprise value to operating income ratio multiple	26.11	The higher the multiple value, the higher the fair value.
			Discount for lack of marketability	20%	The higher the discount for lack of marketability, the lower the fair value.

H. The Group has carefully assessed the valuation models and assumptions used to measure fair value. However, use of different valuation models or assumptions may result in different measurement. The following is the effect of profit or loss or of other comprehensive income from financial assets and liabilities categorised within Level 3 if the inputs used to valuation models have changed:

			December 31, 2019			
			Recognised in profit or loss		Recognised in other comprehensive income	
	Input	Change	Favourable change	Unfavourable change	Favourable change	Unfavourable change
Financial assets						
Equity instrument	Multiple	±1%	$ 1,578	($ 1,578)	$ 33,081	($ 33,081)

			December 31, 2018			
			Recognised in profit or loss		Recognised in other comprehensive income	
	Input	Change	Favourable change	Unfavourable change	Favourable change	Unfavourable change
Financial assets						
Equity instrument	Multiple	±1%	$ -	$ -	$ 29,200	($ 29,200)

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

A. Loans to others: Please refer to table 1.
B. Provision of endorsements and guarantees to others: Please refer to table 2.
C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Please refer to table 3.
D. Acquisition or sale of the same security with the accumulated cost exceeding $300 million or 20% of the Company’ s paid-in capital: Please refer to table 4.
E. Acquisition of real estate reaching NT$300 million or 20% of paid-in capital or more: None.
F. Disposal of real estate reaching NT$300 million or 20% of paid-in capital or more: None.
G. Purchases or sales of goods from or to related parties reaching NT$100 million or 20% of paid-in capital or more: Please refer to table 5.
H. Receivables from related parties reaching NT$100 million or 20% of paid-in capital or more: Please refer to table 6.
I. Trading in derivative instruments undertaken during the reporting periods: None.
J. Significant inter-company transactions during the reporting periods: Please refer to table 7.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China)：Please refer to table 8.

(3) Information on investments in Mainland China

A. Basic information: Please refer to table 9.
B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: Please refer to table 10.

14. SEGMENT INFORMATION

(1) General information:

The Group operates business only in a single industry, primarily engaged in developing, manufacturing and sale of AlInGaP, aluminum gallium arsenide and indium gallium nitride and other epi-wafer chip and die. The Chief Operating Decision-Maker who allocates resources and assesses performance of the Group as a whole, has identified that the Group has only one reportable operating segment.

(2) Information about segment profit or loss, assets and liabilities:

The segment information provided to the Chief Operating Decision-Maker for the reportable segments and reconciliations is as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Revenues from external customers	$ 15,959,831	$ 20,306,412
Segment income (loss)	(3,937,520)	(505,864)
Segment income (loss) including :		
Interest income	43,975	122,283
Interest expense	(160,271)	(175,678)
Depreciation and amortisation	(5,117,282)	(5,025,807)
Investment (loss) profit under equity method	(21,383)	24,146
Income tax (expense) benefit	(183,418)	361,277
Segment assets	58,730,610	62,738,642

Impacts on the segment information in 2019 as a result of the adoption of IFRS 16, 'Leases' are provided in Note 6(8).

(3) Information on products and services

Information is provided in Note 6(24).

(4) Geographical information

Geographical information for the years ended December 31, 2019 and 2018 is as follows:

	Year ended December 31, 2019		Year ended December 31, 2018	
	Revenue	Non-current assets	Revenue	Non-current assets
Taiwan	$ 2,757,518	$ 23,938,021	$ 3,643,086	$ 23,755,024
China	8,988,468	5,821,971	10,923,088	6,557,203
HK	556,523	356,632	958,101	570,364
Korea	973,558	-	1,507,791	-
Malaysia	1,207,758	-	1,570,836	-
Others	1,476,006	25,553	1,703,510	24,217
Total	$ 15,959,831	$ 30,142,177	$ 20,306,412	$ 30,906,808

(5) Major customer information

Major customer information of the Group for the years ended December 31, 2019 and 2018 is as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
	Revenue	Revenue
Customer A	$ 1,234,985	$ 1,716,675
Customer B	$ 1,164,134	$ 2,063,267

EPISTAR CORPORATION AND SUBSIDIARIES
Loans to others
Year ended December 31, 2019

Table 1

Expressed in thousands of NTD
(Except as otherwise indicated)

No.	Creditor	Borrower	General ledger account	Is a related party	Maximum outstanding balance during the year ended December 31, 2019	Balance at December 31, 2019	Actual amount drawn down	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financing	Allowance for doubtful accounts	Item	Value	Limit on loans granted to a single party	Ceiling on total loans granted	Footnote
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd	Other receivables-related	Y	$ 879,000	$ 430,500	$ 86,100	4.20%	Short-term financing	$ -	Working capital	$ -	None	$ -	$ 4,521,919	$ 13,565,757	Note 1
0	Epistar Corporation	Episky Corporation (Xiamen) Ltd.	Other receivables-related parties	Y	1,824,000	861,000	-	5.53%	Short-term financing	-	Working capital	-	None	-	4,521,919	13,565,757	Note 1
0	Epistar Corporation	Yen-Rich Technology Corporation.	Other receivables-related parties	Y	300,000	300,000	-	1.25%	Short-term financing	-	Working capital	-	None	-	4,521,919	13,565,757	Note 1
1	Episky Corporation (Xiamen) Ltd.	Jiangsu Canyang Optoelectronics Ltd	Other receivables-related	Y	460,300	-	-	5.00%	Short-term financing	-	Working capital	-	None	-	858,656	1,073,320	Note 2
2	Epicrystal (Changzhou) Co., Ltd.	Jiangsu Canyang Optoelectronics Ltd	Other receivables-related	Y	368,240	344,400	172,200	4.35%	Short-term financing	-	Working capital	-	None	-	875,898	1,313,847	Note 3
3	Yen-Rich Opto (Hong Kong) Limited	Ecoled Venture Co., Limited	Other receivables-related	Y	15,800	-	-	3.02%	Short-term financing	-	Working capital	-	None	-	115,553	115,553	Note 4
3	Yen-Rich Opto (Hong Kong) Limited	Lighting Inrestment Corporation.	Other receivables-related parties	Y	101,120	95,936	95,936	3.30%	Short-term financing	-	Working capital	-	None	-	115,553	115,553	Note 4

Note 1: In accordance with Epistar Corporation’s Procedures for Provision of Loans: the limit on loans granted to a single party is 10% of its net equity, and the ceiling on total loans granted is 30% of its net equity.
Note 2: In accordance with Episky Corporation (Xiamen) Ltd.'s Procedures for Provision of Loans: the limit on loans granted to a single party is 40% of its net equity, and the ceiling on total loans granted is 50% of its net equity.
Note 3: In accordance with Epicrystal (Changzhou) Co., Ltd.'s Procedures for Provision of Loans: the limit on loans granted to a single party is 20% of its net equity, and the ceiling on total loans granted is 30% of its net equity.
Note 4: In accordance with Yen-Rich Opto (Hong Kong) Limited’s Procedures for Provision of Loans: the limit on loans granted to a single party is 40% of its net equity, and the ceiling on total loans granted is 40% of its net equity.

EPISTAR CORPORATION AND SUBSIDIARIES
Provision of endorsements and guarantees to others
Year ended December 31, 2019

Table 2

Expressed in thousands of NTD
(Except as otherwise indicated)

Number (Note 1)	Endorser/ guarantor	Party being endorsed/guaranteed: Company name	Relationship with the endorser/ guarantor (Note 2)	Limit on endorsements/ guarantees provided for a single party	Maximum outstanding endorsement/ guarantee amount as of December 31, 2019	Outstanding endorsement/ guarantee amount at December 31, 2019	Actual amount drawn down	Amount of endorsements/ guarantees secured with collateral	Ratio of accumulated endorsement/ guarantee amount to net asset value of the endorser/ guarantor company	Ceiling on total amount of endorsements/ guarantees provided (Note 3)	Provision of endorsements/ guarantees by parent company to subsidiary	Provision of endorsements/ guarantees by subsidiary to parent company	Provision of endorsements/ guarantees to the party in Mainland China	Footnote
0	Epistar Corporation	Episky Corp.(Xiamen) Ltd.	3	$ 4,521,919	$ 4,551,550	$ 2,518,320	$ 953,164	$ -	5.57	$ 9,043,838	Y	N	Y	
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd	3	4,521,919	663,600	389,740	206,640	-	0.86	9,043,838	Y	N	Y	
0	Epistar Corporation	Unikorn Semiconductor Corporation	3	4,521,919	706,950	699,900	175,658	-	1.55	9,043,838	Y	N	N	
0	Epistar Corporation	Yen-Rich Technology Corporation.	3	4,521,919	158,000	149,900	-	-	0.33	9,043,838	Y	N	N	

Note 1: The numbers filled in for the endorsements/guarantees provided by the Company or subsidiaries are as follows:
(1) The Company is ‘0’.
(2) The subsidiaries are numbered in order starting from ‘1’.

Note 2: Relationship between the endorser/guarantor and the party being endorsed/guaranteed is classified into the following six categories; fill in the number of category each case belongs to:
(1) Having business relationship.
(2) The endorser/guarantor parent company owns directly more than 50% voting shares of the endorsed/guaranteed subsidiary.
(3) The endorser/guarantor parent company and its subsidiaries jointly own more than 50% voting shares of the endorsed/guaranteed company.
(4) The endorsed/guaranteed parent company directly or indirectly owns more than 50% voting shares of the endorser/guarantor subsidiary.
(5) Mutual guarantee of the trade as required by the construction contract.
(6) Due to joint venture, each shareholder provides endorsements/guarantees to the endorsed/guaranteed company in proportion to its ownership.

Note 3: In accordance with the Company’s Procedures for Provision of Loans: the ceiling on total endorsements/guarantees is 20% of the Company’s net assets, and the limit on endorsements/guarantees to a single party is 10% of its net assets.

EPISTAR CORPORATION AND SUBSIDIARIES
Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)
December 31, 2019

Table 3

Expressed in thousands of NTD
(Except as otherwise indicated)

Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	As of December 31, 2019 Number of shares	Book value	Ownership (%)	Fair value	Footnote
Epistar Corporation	E&E Japan Co.Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	140	$ 2,143	17.07	$ 2,143	
Epistar Corporation	NATEC CORPORATION (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	120,000	1,748	7.50	1,748	
Epistar Corporation	Esleds Co.,Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	1,000	148	10.00	148	
Epistar Corporation	Lynk Labs,Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	92,523	4,587	7.45	4,587	
Epistar Corporation	Advanced Photoelectronic Technology Limited (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	1,339,235	270,562	12.24	270,562	
Epistar Corporation	Chi Lin Optoelectronics Co., Ltd. (Stock)	None	Non-current financial assets at fair value through profit or loss	9,561,340	157,762	12.57	157,762	
Epistar Corporation	Dominant Opto Technologies Sdn. Bhd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	11,000,000	791,211	10.00	791,211	
Epistar Corporation	POWERLIGHTEC CO., LTD (Stock)	None	Non-current financial assets at fair value through profit or loss	141,730	-	17.53	-	
Epistar Corporation	Crystalwise Technology Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	6,340,628	60,109	3.06	60,109	

Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	As of December 31, 2019				Footnote
				Number of shares	Book value	Ownership (%)	Fair value	
Epistar Corporation	XENIO CORPORATION (stock)	None	Non-current financial assets at fair value through profit or loss	7,878	$ -	0.06	$ -	
Epistar Corporation	Edison Opto Corp. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	9,424,000	124,868	7.54	$ 124,868	
Epistar Corporation	Phecda Technology Co., Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	600,000	-	2.11	-	
Epistar Corporation	Elit Fine Ceramics Co., Ltd. (Stock)	None	Non-current financial assets at fair value through profit or loss	2,200,000	-	4.68	-	
Epistar Corporation	Nanocrystal Technology Inc. (Stock)	None	Non-current financial assets at fair value through profit or loss	6,000,000	-	11.11	-	
Epistar Corporation	PlayNitride Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	4,568,669	210,461	12.74	210,461	
Epistar Corporation	OSTENDO TECHNOLOGIES,INC. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	67,500	-	4.50	-	
Epistar Corporation	Global Communication semiconductors LLC (Stock)	None	Current financial assets at fair value through profit or loss	3,627,000	249,900	3.99	249,900	
Epistar JV Holding (BVI) Co.,Ltd.	Everlight electronic(Fujian) Co.,Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	Cash USD2,500,000	44,223	10.00	44,223	
Epistar JV Holding (BVI) Co.,Ltd.	KAISTAR Lighting (Xiamen) Co.,Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	Cash USD48,000,000	1,428,696	17.65	1,428,696	

				As of December 31, 2019				
Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	Number of shares	Book value	Ownership (%)	Fair value	Footnote
Epistar JV Holding (BVI) Co.,Ltd.	Global Communication semiconductors(Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	2,750,000	$ 151,039	3.03	$ 151,039	
Episky Corp.(Xiamen) Ltd.	China Firstar Optoelectronic Materials Co., Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	Cash RMB7,500,000	22,320	15.00	Unlisted company, no comparable market price available	
Episky Corp.(Xiamen) Ltd.	APT Electronics Co., Ltd.(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	4,678,240	50,317	1.14	Unlisted company, no comparable market price available	
Episky Corp.(Xiamen) Ltd.	China Crystal Technologies Co.,Ltd.(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	8,064,516	29,070	4.08	Unlisted company, no comparable market price available	
Lighting Investment Corp.	Advanced Photoelectronic Technology Limited (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	562,018	113,543	5.14	113,543	
Lighting Investment Corp.	Oree Advanced Illumination Solutions, Inc. (Stock)	None	Non-current financial assets at fair value through profit or loss	79,407	-	5.00	-	
Lighting Investment Corp.	Lustrous Technology, Ltd. (Stock)	None	Non-current financial assets at fair value through profit or loss	266,892	-	8.99	-	
Lighting Investment Corp.	TERA XTAL TECHNOLOGY CORPORATION (Stock)	None	Non-current financial assets at fair value through profit or loss	795,000	-	0.42	-	
Lighting Investment Corp.	FormoLight Technologies Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	2,038,230	9,728	10.00	9,728	
Lighting Investment Corp.	XENIO CORPORATION (Stock)	None	Non-current financial assets at fair value through profit or loss	16,462	-	0.13	-	

Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	As of December 31, 2019 Number of shares	Book value	Ownership (%)	Fair value	Footnote
Lighting Investment Corp.	Jojnt Power eXponent, Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	1,250,000	$ 5,000	13.89	$ 5,000	
Lighting Investment Corp.	Edison Opto Corp. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	10,705,000	141,841	8.56	141,841	
Lighting Investment Corp.	Rigidtech Microelectronics Cops. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	1,532,500	5,686	2.14	5,686	
Lighting Investment Corp.	Le Dimond Opto Corporation (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	1,100,000	5,643	16.92	5,643	
Lighting Investment Corp.	LEDLITEK Co., Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	50,000	62,498	6.20	62,498	
Lighting Investment Corp.	De-an Venture Capoital Co., Ltd. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	2,000,000	20,127	10.77	20,127	
Lighting Investment Corp.	iReach Corporation. (Stock)	Investee company accounted for under the equity method of the Company	Non-current investments in equity instruments at fair value through other comprehensive income	150,000	759	1.67	759	
Lighting Investment Corp.	Tekcore Co., Ltd. (Stock)	Investee company accounted for under the equity method of the Company	Current financial assets at fair value through profit or loss	2,616,932	12,928	2.72	12,928	
Lighting Investment Corp.	Edison Opto Corp. (Stock)	None	Current financial assets at fair value through profit or loss	5,851,182	77,528	4.68	77,528	
Lighting Investment Corp.	Epistar Corporation (Stock)	Parent company	Current financial assets at fair value through profit or loss	2,564,755	82,970	0.24	82,970	Note

Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	As of December 31, 2019 Number of shares	Book value	Ownership (%)	Fair value	Footnote
Lighting Investment Corp.	Rigidtech Microelectronics Corp. (Stock)	None	Current financial assets at fair value through profit or loss	17,753	$ 66	0.02	$ 66	
Lighting Investment Corp.	Global Communication semiconductors LLC (Stock)	None	Current financial assets at fair value through profit or loss	2,748,000	189,337	3.03	189,337	
Lighting Investment Corp.	Taishin 1699 Money Market Fund (Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	2,588,671	35,165	N/A	35,165	
Lighting Investment Ltd.	LEDLITEK Co.,LTD. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	41,500	51,873	5.15	51,873	
Lighting Investment Ltd.	Verticle Inc. (Stock)	None	Non-current financial assets at fair value through profit or loss	582,983	-	3.00	-	
Lighting Investment Ltd.	Achrolux Inc. (Stock)	None	Non-current financial assets at fair value through profit or loss	987,500	-	6.91	-	
Lighting Investment Ltd.	PlayNitride Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	778,541	35,864	2.17	35,864	
Lighting Investment Ltd.	Advanced Photoelectronic Technology Limited.(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	200,000	40,405	1.83	40,405	
Full Star Enterprises Limited	Ufeco Technology Inc. (Stock)	None	Non-current financial assets at fair value through profit or loss	Cash USD250,000	-	10.00	-	

Securities held by	Marketable securities	Relationship with the securities issuer	General ledger account	As of December 31, 2019 Number of shares	Book value	Ownership (%)	Fair value	Footnote
Full Star Enterprises Limited	PlayNitride Inc. (Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	600,000	$ 27,640	1.67	$ 27,640	
Full Star Enterprises Limited	Global Communication Semiconductors LLC.(Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	2,100,000	115,339	2.31	115,339	
HUGA Holding (SAMOA) Ltd.	China Crystal Technologies Co.,Ltd.(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	17,741,935	67,526	8.97	67,526	
HUGA Holding (SAMOA) Ltd.	OEPIC SEMICONDUCTORS,INC.(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	377,358	9,139	7.90	9,139	
Yen-Rich Technology Corporation.	Global Communication seiconductors LLC(Stock)	None	Current financial assets at fair value through profit or loss	4,113,000	283,386	4.53	283,386	
Yen-Rich Opto (Hong Kong) Limited	Global Communication Semiconductors LLC.(Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	1,150,000	63,162	1.27	63,162	
AllureLux Corporation	Franklin Templeton Sinoam Money Market Fund(Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	680,537	7,063	N/A	7,063	
AllureLux Corporation	Hua Nan Phoenix Money Market Fund(Beneficiary certificates)	None	Current financial assets at fair value through profit or loss	18,454	301	N/A	301	
ProLight Opto Technology Corporation.	ISON Corporation(Stock)	None	Non-current investments in equity instruments at fair value through other comprehensive income	150,000	1,252	2.50	1,252	

Note : Shown as treasury stocks of Epistar Corporation.

EPISTAR CORPORATION AND SUBSIDIARIES

Acquisition or sale of the same security with the accumulated cost exceeding $300 million or 20% of the Company's paid-in capital

Year ended December 31, 2019

Table 4

Expressed in thousands of NTD
(Except as otherwise indicated)

					Balance as at January 1, 2019 (Note)		Addition		Disposal				Balance as at December 31, 2019 (Note)	
Investor	Marketable securities	General ledger account	Counterparty	Relationship with the counterparty	Number of shares	Amount	Number of shares	Amount	Number of shares	Selling price	Book value	Gain (loss) on disposal	Number of shares	Amount
EPISKY Corporation (Changzhou) LTD	CR Yuanta Money Market Fund B Class(Beneficiary certificates)	Financial assets at fair value through profit or loss	-	NA	-	$ -	36,500,000	$ 157,133	36,500,000	$ 157,685	$ 157,133	$ 552	-	$ -
Epicrystal Corporation (Changzhou) Ltd.	CR Yuanta Money Market Fund B Class(Beneficiary certificates)	Financial assets at fair value through profit or loss	-	NA	-	-	157,800,000	679,329	157,800,000	681,905	679,329	2,576	-	-
Epistar Corporation	CTBC Hwa-win Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	28,567,808	315,000	28,567,808	315,110	315,000	110	-	-
Epistar Corporation	Taishin 1699 Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	30,666,839	415,000	30,666,839	415,244	415,000	244	-	-
Epistar Corporation	Jin Sun Moeney Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	38,980,503	578,000	38,980,503	578,448	578,000	448	-	-
Epistar Corporation	Prudential Financial Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	22,803,397	361,000	22,803,397	361,269	361,000	269	-	-
Epistar Corporation	FSITC Taiwan Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	19,923,250	305,000	19,923,250	305,187	305,000	187	-	-
Yen-Rich Technology Corporation.	Taishin 1699 Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	22,911,086	310,000	22,911,086	310,265	310,000	265	-	-
Yen-Rich Technology Corporation.	FSITC Taiwan Money Market Fund	Financial assets at fair value through profit or loss	-	NA	-	-	23,517,813	360,000	23,517,813	360,363	360,000	363	-	-
Epistar Corporation	Yen-Rich Technology Corporation.	Investments accounted for using equity method	-	Subsidiary	-	-	-	918,728	-	-	-	-	-	918,728

Note 1: The balance consists gain on valuation of financial assets.

EPISTAR CORPORATION AND SUBSIDIARIES

Purchases or sales of goods from or to related parties reaching NT$100 million or 20% of paid-in capital or more

Year ended December 31, 2019

Table 5

Expressed in thousands of NTD
(Except as otherwise indicated)

			Transaction				Differences in transaction terms		Notes/accounts receivable (payable)		
Purchaser/seller	Counterparty	Relationship with the counterparty	Purchases (sales)	Amount	Percentage of total purchases (sales)	Credit term	Unit price	Credit term	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Epistar Corporation	Everlight Electronics Co., Ltd and its subsidiaries	Director of the Company	Sales	($ 633,080)	5	150 days after month-end closing	N/A	Normal	$ -	-	
Epistar Corporation	LEDAZ Co., Ltd	Investee company accounted for using equity method by the Company's subsidiary	Sales	(179,599)	1	90 days after month-end closing	N/A	Normal	71,314	1	
Epistar Corporation	Yen-Rich Technology Corporation.	Subsidiary of the Company	Sales	(230,511)	2	120 days after month-end closing	N/A	Normal	86,508	1	
Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	The Company's indirectly owned subsidiary	Sales	(184,669)	1	180 days after next month-end closing	N/A	Normal	87,845	1	
Epistar Corporation	Luxlite (Shenzhen) Corporation Limited	The Company's indirectly owned subsidiary	Sales	(1,425,371)	11	180 days after next month-end closing	N/A	Normal	775,081	12	
Epistar Corporation	Episky Corp.(Xiamen) Ltd.	The Company's indirectly owned subsidiary	Sales	(768,584)	6	180 days after next month-end closing	N/A	Normal	335,714	5	
Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	The Company's indirectly owned subsidiary	Sales	(449,614)	4	90 days after month-end closing	N/A	Normal	83,183	1	

			Transaction				Differences in transaction terms		Notes/accounts receivable (payable)		
Purchaser/seller	Counterparty	Relationship with the counterparty	Purchases (sales)	Amount	Percentage of total purchases (sales)	Credit term	Unit price	Credit term	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	The Company's indirectly owned subsidiary	Purchases	$ 378,190	5	30 days after month-end closing	N/A	Normal	($ 38,419)	2	
Epistar Corporation	Episky Corp.(Xiamen) Ltd.	The Company's indirectly owned subsidiary	Purchases	287,519	4	60 days after next month-end closing	N/A	Normal	(50,045)	3	
Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	The Company's indirectly owned subsidiary	Purchases	1,230,596	17	150 days after month-end closing	N/A	Normal	(497,916)	28	
Yen-Rich Technology Corporation.	LEDAZ Co., Ltd	Note 1	Sales	(196,254)	33	90 days after month-end closing	N/A	Normal	78,196	36	
Yen-Rich Technology Corporation.	Epistar Corporation	Subsidiary of the Company	Purchases	230,511	38	120 days after month-end closing	N/A	Normal	(86,508)	37	
Jiangsu Canyang Optoelectronics Ltd.	Epistar Corporation	The Company's indirectly owned subsidiary	Sales	(378,190)	39	30 days after month-end closing	N/A	Normal	38,419	6	
Jiangsu Canyang Optoelectronics Ltd.	Episky Corp.(Xiamen) Ltd.	Note 1	Sales	(419,324)	43	90 days after month-end closing	N/A	Normal	146,164	22	
Jiangsu Canyang Optoelectronics Ltd.	Epicrystal Corporation (Changzhou) Ltd.	Note 1	Sales	(228,902)	23	90 days after month-end closing	N/A	Normal	17,453	3	
Jiangsu Canyang Optoelectronics Ltd.	Epistar Corporation	The Company's indirectly owned subsidiary	Purchases	184,669	18	180 days after month-end closing	N/A	Normal	(87,845)	46	

			Transaction				Differences in transaction terms		Notes/accounts receivable (payable)		
Purchaser/seller	Counterparty	Relationship with the counterparty	Purchases (sales)	Amount	Percentage of total purchases (sales)	Credit term	Unit price	Credit term	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Jiangsu Canyang Optoelectronics Ltd.	Epicrystal Corporation (Changzhou) Ltd.	Note 1	Purchases	$ 201,471	20	90 days after month-end closing	N/A	Normal	($ 76,311)	40	
Luxlite (Shenzhen) Corporation Limited	Epistar Corporation	The Company’s indirectly owned subsidiary	Purchases	1,425,371	44	180 days after next month-end closing	N/A	Normal	(775,081)	47	
Luxlite (Shenzhen) Corporation Limited	Episky Corp.(Xiamen) Ltd.	Note 1	Purchases	1,806,330	56	120 days after month-end closing	N/A	Normal	(856,519)	52	
Episky Corp.(Xiamen) Ltd.	Epistar Corporation	The Company’s indirectly owned subsidiary	Sales	(287,519)	9	60 days after next month-end closing	N/A	Normal	50,045	2	
Episky Corp.(Xiamen) Ltd.	Luxlite (Shenzhen) Corporation Limited	Note 1	Sales	(1,806,330)	55	120 days after month-end closing	N/A	Normal	856,519	39	
Episky Corp.(Xiamen) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	The Company’s indirectly owned subsidiary	Purchases	419,324	15	90 days after month-end closing	N/A	Normal	(146,164)	11	
Episky Corp.(Xiamen) Ltd.	Epistar Corporation	The Company’s indirectly owned subsidiary	Purchases	768,584	28	180 days after next month-end closing	N/A	Normal	(335,714)	24	
Episky Corp.(Xiamen) Ltd.	Epicrystal Corporation (Changzhou) Ltd.	Note 1	Purchases	1,081,074	40	90 days after month-end closing	N/A	Normal	(943,635)	68	
Epicrystal Corporation (Changzhou) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	Note 1	Sales	(201,471)	9	90 days after month-end closing	N/A	Normal	76,311	4	

			Transaction				Differences in transaction terms		Notes/accounts receivable (payable)		
Purchaser/seller	Counterparty	Relationship with the counterparty	Purchases (sales)	Amount	Percentage of total purchases (sales)	Credit term	Unit price	Credit term	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Epicrystal Corporation (Changzhou) Ltd.	Epistar Corporation	The Company's indirectly owned subsidiary	Sales	($ 1,230,596)	53	150 days after month-end closing	N/A	Normal	$ 497,916	24	
Epicrystal Corporation (Changzhou) Ltd.	Episky Corp.(Xiamen) Ltd.	Note 1	Sales	(1,081,074)	46	90 days after month-end closing	N/A	Normal	943,635	46	
Epicrystal Corporation (Changzhou) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	Note 1	Purchases	228,902	14	90 days after month-end closing	N/A	Normal	(17,453)	3	
Epicrystal Corporation (Changzhou) Ltd.	Epistar Corporation	The Company's indirectly owned subsidiary	Purchases	449,614	27	90 days after month-end closing	N/A	Normal	(83,183)	13	
ProLight Opto Technology Corporation	Shanghai Welight Electronic Co., LTD.	Note 1	Sales	(170,826)	38	120 days after month-end closing	N/A	Normal	167,605	72	
Shanghai Welight Electronic Co., LTD.	ProLight Opto Technology Corporation	Note 1	Purchases	170,826	99	120 days after month-end closing	N/A	Normal	(167,605)	100	

Note 1: Investee company accounted for under the equity method directly and indirectly.

EPISTAR CORPORATION AND SUBSIDIARIES

Receivables from related parties reaching NT$100 million or 20% of paid-in capital or more

December 31, 2019

Table 6

Expressed in thousands of NTD
(Except as otherwise indicated)

Creditor	Counterparty	Relationship with the counterparty	Balance as at December 31, 2019		Total	Turnover rate	Overdue receivables		Amount collected subsequent to the balance sheet date	Allowance for doubtful debts
			Accounts receivable	Other receivable			Amount	Action taken		
Epistar Corporation	Yen-Rich Technology Corporation.	Subsidiary of the Company	$ 86,508	$ 37,537	$ 124,045	3.72	1,958	-	22,144	$ -
Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	The Company's indirectly owned subsidiary	87,845	231,137	318,982	0.56	131,255	-	15,635	-
Epistar Corporation	Luxlite (Shenzhen) Corporation Limited	The Company's indirectly owned subsidiary	775,081	960	776,041	2.15	14	-	122,207	-
Epistar Corporation	Episky Corp.(Xiamen) Ltd.	The Company's indirectly owned subsidiary	335,714	34,368	370,082	1.13	25,049	-	55,035	-
Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	The Company's indirectly owned subsidiary	83,183	23,060	106,243	4.10	350	-	24,831	-
Epistar Corporation	Unikorn Semiconductor Corporation	Subsidiary of the Company	6,116	106,577	112,693	1.08	7,351	-	8,821	-
Yen-Rich Technology Corporation.	LEDAZ Co., Ltd	Note 2	78,196	-	78,196	5.02	23,170	-	40,330	-
Episky Corp.(Xiamen) Ltd.	Luxlite (Shenzhen) Corporation Limited	Note 2	856,519	-	856,519	2.03	267,865	-	43,050	-
Epicrystal Corporation (Changzhou) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	Note 2	76,311	174,109	250,420	0.65	312	-	573	-
Epicrystal Corporation (Changzhou) Ltd.	Epistar Corporation	The Company's indirectly owned subsidiary	497,916	606	498,522	3.84	92	-	108,839	-

Creditor	Counterparty	Relationship with the counterparty	Balance as at December 31, 2019 Accounts receivable	Balance as at December 31, 2019 Other receivable	Total	Turnover rate	Overdue receivables Amount	Overdue receivables Action taken	Amount collected subsequent to the balance sheet date	Allowance for doubtful debts
Epicrystal Corporation (Changzhou) Ltd.	Episky Corp.(Xiamen) Ltd.	Note 2	$ 943,635	$ 1,191	$ 944,826	1.86	619,838	-	-	$ -
ProLight Opto Technology Corporation	Shanghai Welight Electronic Co., LTD.	Note 2	167,605	-	167,605	2.04	-	-	37,159	-

Note 1: The Company endeavored to purpose the overdue amount. Epistar has receive $1,519、$1,647、$14 and $244 from Yen-Rich、Jiangsu Canyan、 Luxlite and Epicrystal,respectively;Yen-Rich has receive $23,170 from LEDAZ respective; Episky(xiamen) has receive $43,050 from Luxlite respectively; Epicrystal has receive $312 and $92 from Jiangsu Canyan and Epistar respectively.

Note 2: Investee company accounted for under the equity method directly and indirectly.

EPISTAR CORPORATION AND SUBSIDIARIES

Significant inter-company transactions during the reporting periods

Year ended December 31, 2019

Table 7

Expressed in thousands of NTD
(Except as otherwise indicated)

				Transaction			
Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
0	Epistar Corporation	LEDAZ Co., Ltd	1	Sales	$ 179,599	Conducted in the ordinary course of business with terms similar to those with third parties	1.13
0	Epistar Corporation	Yen-Rich Technology Corporation.	1	Sales	230,511	Conducted in the ordinary course of business with terms similar to those with third parties	1.44
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	1	Sales	184,669	Conducted in the ordinary course of business with terms similar to those with third parties	1.16
0	Epistar Corporation	Luxlite (Shenzhen) Corporation Limited	1	Sales	1,425,371	Conducted in the ordinary course of business with terms similar to those with third parties	8.93
0	Epistar Corporation	Episky Corp.(Xiamen) Ltd.	1	Sales	768,584	Conducted in the ordinary course of business with terms similar to those with third parties	4.82
0	Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	1	Sales	449,614	Conducted in the ordinary course of business with terms similar to those with third parties	2.82
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	1	Cost of goods sold	378,190	Conducted in the ordinary course of business with terms similar to those with third parties	2.37
0	Epistar Corporation	Episky Corp.(Xiamen) Ltd.	1	Cost of goods sold	287,519	Conducted in the ordinary course of business with terms similar to those with third parties	1.80

				Transaction			
Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
0	Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	1	Cost of goods sold	$ 1,230,596	Conducted in the ordinary course of business with terms similar to those with third parties	7.71
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	1	Accounts receivable	87,845	Conducted in the ordinary course of business with terms similar to those with third parties	0.15
0	Epistar Corporation	Luxlite (Shenzhen) Corporation Limited	1	Accounts receivable	775,081	Conducted in the ordinary course of business with terms similar to those with third parties	1.32
0	Epistar Corporation	Episky Corp.(Xiamen) Ltd.	1	Accounts receivable	335,714	Conducted in the ordinary course of business with terms similar to those with third parties	0.57
0	Epistar Corporation	LEDAZ Co., Ltd	1	Accounts payable	148,416	Conducted in the ordinary course of business with terms similar to those with third parties	0.25
0	Epistar Corporation	Epicrystal Corporation (Changzhou) Ltd.	1	Accounts payable	497,916	Conducted in the ordinary course of business with terms similar to those with third parties	0.85
0	Epistar Corporation	Jiangsu Canyang Optoelectronics Ltd.	1	Other receivable	231,137	Based on contract terms	0.39
0	Epistar Corporation	Unikorn Semiconductor Corporation	3	Other receivable	106,577	Conducted in the ordinary course of business with terms similar to those with third parties	0.18
1	Episky Corp.(Xiamen) Ltd.	Luxlite (Shenzhen) Corporation Limited	3	Sales	1,806,330	Conducted in the ordinary course of business with terms similar to those with third parties	11.32

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	Transaction: General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
1	Episky Corp.(Xiamen) Ltd.	Luxlite (Shenzhen) Corporation Limited	3	Accounts receivable	$ 856,519	Conducted in the ordinary course of business with terms similar to those with third parties	1.46
2	Epicrystal Corporation (Changzhou) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	3	Sales	201,471	Conducted in the ordinary course of business with terms similar to those with third parties	1.26
2	Epicrystal Corporation (Changzhou) Ltd.	Episky Corp.(Xiamen) Ltd.	3	Sales	1,081,074	Conducted in the ordinary course of business with terms similar to those with third parties	6.77
2	Epicrystal Corporation (Changzhou) Ltd.	Episky Corp.(Xiamen) Ltd.	3	Accounts receivable	943,635	Conducted in the ordinary course of business with terms similar to those with third parties	1.61
2	Epicrystal Corporation (Changzhou) Ltd.	Jiangsu Canyang Optoelectronics Ltd.	3	Other receivable	174,109	Based on contract terms	0.30
3	Yen-Rich Technology Corporation.	LEDAZ Co., Ltd	3	Sales	196,254	Conducted in the ordinary course of business with terms similar to those with third parties	1.23
3	Yen-Rich Technology Corporation.	LEDAZ Co., Ltd	3	Accounts receivable	78,196	Conducted in the ordinary course of business with terms similar to those with third parties	0.13
4	Jiangsu Canyang Optoelectronics Ltd.	Episky Corp.(Xiamen) Ltd.	3	Sales	419,324	Conducted in the ordinary course of business with terms similar to those with third parties	2.63
4	Jiangsu Canyang Optoelectronics Ltd.	Epicrystal Corporation (Changzhou) Ltd.	3	Sales	228,902	Conducted in the ordinary course of business with terms similar to those with third parties	1.43

				Transaction			
Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
4	Jiangsu Canyang Optoelectronics Ltd.	Epicrystal Corporation (Changzhou) Ltd.	3	Accounts receivable	$ 17,453	Conducted in the ordinary course of business with terms similar to those with third parties	0.03
4	Jiangsu Canyang Optoelectronics Ltd.	Epicrystal Corporation (Changzhou) Ltd.	3	Processing Fees	416	Conducted in the ordinary course of business with terms similar to those with third parties	0.00
5	ProLight Opto Technology Corporation	Shanghai Weilight Electornic Co., LTD.	3	Sales	170,826	Conducted in the ordinary course of business with terms similar to those with third parties	1.07
5	ProLight Opto Technology Corporation	Shanghai Weilight Electornic Co., LTD.	3	Accounts receivable	167,605	Conducted in the ordinary course of business with terms similar to those with third parties	0.29

Note 1: Parent company is ‘0’.The subsidiaries are numbered in order starting from ‘1’.
Note 2: Relationship between transaction company and counterparty is classified into the following three categories; fill in the number of category each case belongs to (If transactions between parent company and subsidiaries or between subsidiaries refer to the same transaction, it is not required to disclose twice. For example, if the parent company has already disclosed its transaction with a subsidiary, then the subsidiary is not required to disclose the transaction; for transactions between two subsidiaries, if one of the subsidiaries has disclosed the transaction, then the other is not required to disclose the transaction.):
(1) Parent company to subsidiary.
(2) Subsidiary to parent company.
(3) Subsidiary to subsidiary.
Note 3: Regarding percentage of transaction amount to consolidated total operating revenues or total assets, it is computed based on period-end balance of transaction to consolidated total assets for balance sheet accounts and based on accumulated transaction amount for the period to consolidated total operating revenues for income statement accounts.
Note 4: Disclosure of the transactions over 100 million New Taiwan dollars only and the related party transactions for counterparty are not disclosed.

EPISTAR CORPORATION AND SUBSIDIARIES

Information on investees

Year ended December 31, 2019

Table 8

Expressed in thousands of NTD

(Except as otherwise indicated)

Investor	Investee	Location	Main business activities	Initial investment amount: Balance as at December 31, 2019	Initial investment amount: Balance as at December 31, 2018	Shares held as at December 31, 2019: Number of shares (Note)	Shares held as at December 31, 2019: Ownership (%)	Shares held as at December 31, 2019: Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Epistar Corporation	iReach Corporation	Taiwan	Packaging, module design, manafacturing and sales of LED	$ 70,000	$ 70,000	7,000,000	100.00	$ 48,974	$ 11,469	$ 11,469	
Epistar Corporation	Ecoled Venture Co.,Limited	Hong Kong	Sales of LED lighting facilities	-	82,348	-	0.00	-	19,736	10,261	Note 1
Epistar Corporation	Epistar JV Holding (BVI) Co.,Ltd.	British Virgin Islands	Professional investment	14,960,129	14,960,129	48,278	100.00	9,030,452	(666,350)	(766,532)	
Epistar Corporation	Full Star Enterprises Limited	Hong Kong	Professional investment	166,785	166,785	Cash USD8,660,000	100.00	257,907	7,599	7,599	
Epistar Corporation	GaN Ventures Co., Limited	Hong Kong	Investment holding; sales of electronic components	212,667	275,117	13,886,743	59.02	12,919	(90,478)	(53,400)	
Epistar Corporation	Yen-Rich Technology Corporation.	Taiwan	Manufacturing and sales of electronic components	600,000	600,000	60,000,000	100.00	1,123,339	(28,223)	(28,223)	
Epistar Corporation	Lighting Investment Corp.	Taiwan	Professional investment	2,161,814	2,161,814	251,478,518	100.00	2,081,416	135,696	140,662	
Epistar Corporation	Nan Ya Photonics Incorporation	Taiwan	LED light application,manafacturing and sales	840,381	840,381	18,806,694	40.80	450,672	98,067	40,012	

Investor	Investee	Location	Main business activities	Initial investment amount: Balance as at December 31, 2019	Initial investment amount: Balance as at December 31, 2018	Shares held as at December 31, 2019: Number of shares (Note)	Shares held as at December 31, 2019: Ownership (%)	Shares held as at December 31, 2019: Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Epistar Corporation	Tekcore Co., Ltd.	Taiwan	Manufacturing and sales of LED chips and LED lighting facilities	$ 1,169,412	$ 1,169,412	20,247,828	21.05	$ 37,788	($ 120,081)	($ 25,279)	
Epistar Corporation	Unikorn Semiconductor Corporation	Taiwan	Development, manufacturing and sales of LED chips and LED lighting facilities	1,000,000	1,000,000	100,000,000	85.91	571,113	(436,932)	(377,906)	
Epistar Corporation	ProLight Opto Technology Corporation	Taiwan	Packaging, manufacturing and sales of LED	101,500	130,375	5,800,000	8.52	88,278	(55,888)	(4,849)	
Epistar Corporation	SH Optotech Co., Ltd.	Taiwan	Sales of LED chips and LED lighting facilities	31,792	31,792	3,179,176	49.00	3,192	1,076	527	
Epistar Corporation	TE Opto Corporation	Taiwan	Sales of LED chips and LED lighting facilities	9,200	9,200	920,000	40.00	45,524	13,075	5,230	
Epistar Corporation	GaN Force Corporation	Taiwan	Design, manufacturing and sales of LED	63,800	-	1,063,000	64.31	56,283	(11,533)	(7,417)	
Crystaluxx SARL	LEDOLUX Sp.Zo.O.	Poland	Assembling and sales of LED bulbs	133,455	133,455	156,994	60.00	14,051	(798)	(479)	
Epistar JV Holding (BVI) Co.,Ltd.	Country Lighting (BVI) Co.,Ltd.	British Virgin Islands	Professional investment	89,843	89,843	3,060,000	36.43	91,723	(65)	(24)	
Epistar JV Holding (BVI) Co.,Ltd.	Crystal Light Enterprise Group Ltd.	British Virgin Islands	Professional investment	6,754	6,754	Cash USD200,000	100.00	26,093	(311)	(311)	

Investor	Investee	Location	Main business activities	Initial investment amount: Balance as at December 31, 2019	Initial investment amount: Balance as at December 31, 2018	Shares held as at December 31, 2019: Number of shares (Note)	Shares held as at December 31, 2019: Ownership (%)	Shares held as at December 31, 2019: Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Epistar JV Holding (BVI) Co.,Ltd.	HUGA Holding (SAMOA) Limited	SAMOA	Professional investment	$ 334,967	$ 331,951	12,551,035	100.00	$ 79,880	$ 51,872	$ 51,872	
Epistar JV Holding (BVI) Co.,Ltd.	LiteStar JV Holding (BVI) Co.,Ltd.	British Virgin Islands	Professional investment	3,408,835	3,408,835	10,882	82.41	3,341,085	(119,528)	(98,503)	
Epistar JV Holding (BVI) Co.,Ltd.	United LED Corporation (Hong Kong) Limited	Hong Kong	Professional investment	2,029,760	2,029,760	67,000,165	74.86	342,534	(165,085)	(123,583)	
Epistar JV Holding (BVI) Co.,Ltd.	Episky (Hong Kong) Ltd.	Hong Kong	Professional investment	2,124,096	2,124,096	Cash USD68,000,000	100.00	2,083,512	(284,375)	(284,375)	
Epistar JV Holding (BVI) Co.,Ltd.	Can Yang Investments Limited	Hong Kong	Professional investment	4,291,894	4,291,894	Cash USD141,272,700	80.10	1,415,308	(275,527)	(168,451)	
GaN Ventures Co., Limited	GV Semiconductor Inc.	USA	R&D and sales of electronic components	177,602	91,225	-	0.00	-	(76,243)	(76,243)	
GaN Force Corporation	GV Semiconductor Inc.	USA	R&D and sales of electronic components	44,466	-	Cash USD6,680,000	100.00	32,668	(11,449)	(11,449)	
HUGA Holding (SAMOA) Limited	Ecoled Venture Co.,Limited	Hong Kong	Sales of LED lighting facilities	-	24,655	-	0.00	-	19,736	9,475	Note 1
Lighting Investment Ltd.	GaN Ventures Co.,Limited	Hong Kong	Investment holding; sales of electronic components	64	64	1,500,000	4.92	1,077	(90,478)	(4,452)	

Investor	Investee	Location	Main business activities	Initial investment amount: Balance as at December 31, 2019	Initial investment amount: Balance as at December 31, 2018	Shares held as at December 31, 2019: Number of shares (Note)	Shares held as at December 31, 2019: Ownership (%)	Shares held as at December 31, 2019: Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	Footnote
Lighting Investment Ltd.	LEDAZ CO., Ltd.	Korea	Engineering service of LED	$ 48,166	$ 48,166	88,460	28.13	$ 34,117	($ 46,707)	($ 27,071)	
Lighting Investment Ltd.	Interlight OPtotech (HK) Co.,Limited	Hong Kong	Packaging, manufacturing and sales of LED	12,806	12,806	429,000	30.00	12,705	(1,232)	(397)	
Lighting Investment Ltd.	Epistar (Hong Kong) Limited	Hong Kong	Professional investment	2,556	2,556	82,850	100.00	2,080	(32)	(32)	
Lighting Investment Ltd.	Luxlite (HK) Corporation Limited	Hong Kong	Professional investment	91,286	91,286	2,850,000	75.00	321,159	120,918	90,689	
LiteStar JV Holding (BVI) Co.,Ltd.	Epicrystal (Hong Kong) Co. Ltd.	Hong Kong	Professional investment	4,403,034	4,403,034	146,600,000	100.00	4,053,019	(119,460)	(119,460)	
Lighting Investment Corp.	Crystaluxx SARL	Luxembourg	Professional investment	131,659	131,659	33,200	100.00	12,734	(1,844)	(1,844)	
Lighting Investment Corp.	LEDAZ CO., Ltd.	Korea	Engineering service of LED	23,993	23,993	44,065	14.01	21,228	(46,707)	(13,447)	
Lighting Investment Corp.	Lighting Investment Ltd.	British Virgin Islands	Professional investment	152,701	152,701	45,642	100.00	592,768	52,468	52,468	
Lighting Investment Corp.	Yen-Rich Opto (Hong Kong) Limited	Hong Kong	Sales of LED light components	250,731	250,731	8,010,000	100.00	295,781	7,113	7,113	

				Initial investment amount		Shares held as at December 31, 2019					Footnote
Investor	Investee	Location	Main business activities	Balance as at December 31, 2019	Balance as at December 31, 2018	Number of shares (Note)	Ownership (%)	Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	
Lighting Investment Corp.	Nan Ya Photonics Incorporation	Taiwan	LED light application	$ 50,561	$ 50,561	1,135,430	2.46	$ 35,862	$ 98,085	$ 2,416	
Lighting Investment Corp.	ProLight Opto Technology Corporation	Taiwan	Packaging and sales of LED chips and LED lighting facilities	318,929	214,329	27,539,234	40.46	420,117	(55,888)	(22,023)	
Lighting Investment Corp.	Can Yang Investments Limited	Hong Kong	Professional investment	72,436	72,436	5,218,605	6.87	121,388	(275,527)	(18,929)	
Lighting Investment Corp.	allureLux Corporation	Taiwan	Development and design services of LED lamps	30,000	30,000	3,000,000	100.00	7,638	(4,423)	(4,423)	
Yen-Rich Technology Corporation.	ProLight Opto Technology Corporation	Taiwan	Packaging, manufacturing and sales of LED	29,372	-	2,462,000	3.62	37,537	(51,586)	(1,868)	
Epistar (Hong Kong) Limited	ES-LEDRU LLC.	Russia	Sales of LED products	2,474	2,474	4,036,069	49.00	2,231	-	-	
Episky Corp.(Xiamen) Ltd.	Epicrystal Corporation (Changzhou) Ltd.	China-Changzhou	Assembling and sales of LED bulbs	147,472	147,472	Cash USD5,200,000	3.31	143,666	(127,901)	(4,234)	
Episky Corp.(Xiamen) Ltd.	Episky Corporation (Changzhou) Ltd.	China-Changzhou	Manufacturing and sales of LED chips and LED lighting facilities	-	99,056	-	0.00	-	(9,237)	(9,237)	Note 1
Episky Corp.(Xiamen) Ltd.	EPIRICH (Guangzhou)Co.,Ltd	China-Guangzhou	Development and sales of LED products	-	40,382	-	0.00	-	(69)	(69)	Note 3

				Initial investment amount		Shares held as at December 31, 2019					Footnote
Investor	Investee	Location	Main business activities	Balance as at December 31, 2019	Balance as at December 31, 2018	Number of shares (Note)	Ownership (%)	Book value	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognised by the Company for the year ended December 31, 2019	
allureLux Corporation	AllureLux Inc.	USA	Design and sales of LED lighting	$ -	$ 16,795	-	0.00	$ -	($ 2,977)	($ 2,977)	Note 2
ProLight Opto Technology Corporation	Prolight Opto Holding Corporation	Seychelles	Protessional investment	4,402	4,402	150,000	100.00	(1,211)	2,364	4,443	
Prolight Opto Holding Corporation	ProLight Opto Technology Corporation	Seychelles	Protessional investment	4,403	4,403	150,000	100.00	(1,184)	2,364	4,443	

Note 1:The liquidation was completed on December , 2019 as the company will not continue its operation.
Note 2: The liquidation was completed on February , 2019 as the company will not continue its operation.
Note 3: The liquidation was completed on April , 2019 as the company will not continue its operation.

EPISTAR CORPORATION AND SUBSIDIARIES

Information on investments in Mainland China

Year ended December 31, 2019

Table 9

Expressed in thousands of NTD

(Except as otherwise indicated)

Investee in Mainland China	Main business activities	Paid-in capital	Investment method （Note 1）	Accumulated amount of remittance from Taiwan to Mainland China as of January 1, 2019	Amount remitted from Taiwan to Mainland China/ Amount remitted back to Taiwan for the year ended December 31, 2019		Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Net income of investee as of December 31, 2019	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2019 （Note 2）	Book value of investments in Mainland China as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2019	Footnote
					Remitted to Mainland China	Remitted back to Taiwan							
Episky Corporation (Xiamen) Ltd.	Manufacturing and sales of LED chips and LED lighting facilities	$ 2,038,640	2	$ 2,038,640	$ -	$ -	$ 2,038,640	($ 284,408)	100.00	($ 284,408)	$ 2,083,505	$ -	2(3)
United LED Shandong Corporation	Manufacturing and sales of LED chips and LED lighting facilities	2,518,320	2	1,911,225	-	-	1,911,225	(165,485)	74.86	(123,882)	341,252	-	2(3)
Epicrystal Corporation (Changzhou) Ltd.	Manufacturing and sales of LED chips and LED lighting facilities	4,706,860	2	3,585,608	-	-	3,585,608	(127,901)	76.95	(98,426)	3,340,092	-	2(1)
Luxlite (Shenzhen) Corporation Limited	Sales of LED lighting facilities	89,940	2	22,511	-	-	22,511	125,395	75.00	94,046	238,126	57,861	2(1)

Investee in Mainland China	Main business activities	Paid-in capital	Investment method （Note 1）	Accumulated amount of remittance from Taiwan to Mainland China as of January 1, 2019	Amount remitted from Taiwan to Mainland China/ Amount remitted back to Taiwan for the year ended December 31, 2019: Remitted to Mainland China	Amount remitted from Taiwan to Mainland China/ Amount remitted back to Taiwan for the year ended December 31, 2019: Remitted back to Taiwan	Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Net income of investee as of December 31, 2019	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2019 （Note 2）	Book value of investments in Mainland China as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2019	Footnote
KAISTAR Lighting (Xiamen) Co., Ltd.	Manufacturing and sales of LED chips and LED lighting facilities	$ 8,154,525	2	$ 1,530,779	$ -	$ -	$ 1,530,779	$ -	18.77	$ -	$ 1,428,696	$ -	2(3) 7
Everlight Electronics (Fujian) Co., Ltd	Manufacturing and sales of LED backlight and related parts	749,500	2	74,950	-	-	74,950	-	10.00	-	44,223	-	2(3)
APT Electronics Co., Ltd.	Developing, manufacture and sale of LED extension and chip, module and light instrument	1,771,488	3	218,751	36,898	-	255,649	-	11.81	-	-	-	2(3)
China Crystal Technologies Co.,Ltd.	Developing, manufacture and sale of gallium arsenide unit crystal and chips	851,380	2	100,632	-	-	100,632	-	8.97	(9,582)	67,526	-	2(3)
Ufeco Technology Inc.	Developing and manufacturing LED application and sales of selfproduct	$ 74,950	2	$ 7,808	$ -	$ -	$ 7,808	$ -	10.00	$ -	$ -	$ -	2(3)

Investee in Mainland China	Main business activities	Paid-in capital	Investment method (Note 1)	Accumulated amount of remittance from Taiwan to Mainland China as of January 1, 2019	Amount remitted from Taiwan to Mainland China/ Amount remitted back to Taiwan for the year ended December 31, 2019		Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Net income of investee as of December 31, 2019	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2019 (Note 2)	Book value of investments in Mainland China as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2019	Footnote
					Remitted to Mainland China	Remitted back to Taiwan							
Very Optoelectronics (HUI ZHOU) Co., Ltd.	Research and development, manufacturing and sale of LED packaging; research and development, manufacturing and sale of backlight module, lighting modules and accessories	430,500	2	219,457	-	-	219,457	-	0.00	-	-	-	2(3)
Ningbo Formosa Epitaxy Incorporation	Manufacturing and sales of LED chips and LED lighting facilities	5,996	2	50,463	-	-	50,463	(311)	100.00	(311)	26,093	-	2(3)
Jiangsu Canyang Optoelectronics Ltd.	Manufacturing and sales of LED chips and LED lighting facilities	5,756,160	2	2,387,089	-	-	2,387,089	(275,384)	86.97	(239,626)	1,536,695	-	2(3)
Shanghai Welight Electronic Co., LTD.	Wholesale and export and import of LED and related electronic products	$ 4,497	2	$ 4,497	$ -	$ -	$ 4,497	$ 2,633	52.60	$ 4,443	($ 1,157)	$ -	2(2)

Company name	Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2019	Investment amount approved by the Investment Commission of the Ministry of Economic Affairs (MOEA)	Ceiling on investments in Mainland China imposed by the Investment Commission of MOEA
Epistar Corporation	$ 12,241,483	$ 13,277,209	$ 28,317,215

Note 1: The investments are classified in three types; they are numbered as follows:

1. Direct investment in Mainland China companies;
2. Through investing in an existing company in the third area, which then invested in the investee in Mainland China.
3. Other ways.

Note 2: Investment income or loss in this period:

The bases for recognition of investment income or loss are classified into four types; they are numbered as follows:

1. The financial statements that are audited by the international accounting firm which has a cooperative relationship with the R.O.C. accounting firm;
2. The financial statements that are audited by the R.O.C. parent company's independent accountants;
3. Others: The financial statements that are not audited by the independent accountants

Note 3: The amount disclosed was based on Investment Commission, MOEA Regulation No. 09704604680 announced on August 29, 2008.

Note 4: The numbers in the table shall be expressed in NTD. Foreign currencies shall be translated into NTD at the exchange rate prevailing on the financial reporting date.

Note 5: The 'amounts' are expressed in thousands of New Taiwan dollars.

Note 6: The shares of Very Optoelectronics (HUI ZHOU) Co., Ltd. and Cosmoled Lighting Limited were all disposed on March 14, 2018 and June 25, 2018.

Note 7: The Group lost significant influence over KAISTAR Lighting (Xiamen) Co., Ltd. as the shares of it owned by the Group were less than 20% on April 26, 2018. Therefore, the Group reclassified them into financial assets at fair value through other comprehensive income in accordance with IFRSs.

EPISTAR CORPORATION AND SUBSIDIARIES

Significant transactions conducted with investees in Mainland China directly or indirectly through other companies in the third areas

Year ended December 31, 2019

Table 10

Expressed in thousands of NTD

(Except as otherwise indicated)

Investee in Mainland China	Sale (purchase)		Property transaction		Accounts receivable (payable)		Provision of endorsements/guarantees or collaterals		Financing				Others
	Amount	%	Amount	%	Balance at December 31, 2019	%	Balance at December 31, 2019	Purpose	Maximum balance during the year ended December 31,	Balance at December 31, 2019	Interest rate	Interest during the year ended December 31, 2019	
Shanghai Welight Electronic Co., LTD.	$ 170,826	1	$ -	-	$ 167,605	-	$ -	–	$ -	$ -	-	$ -	
Jiangsu Canyang Optoelectronics Ltd.	184,669	1	132,258	15	87,845	-	389,740	–	879,000	430,500	4.2%	5,868	
Jiangsu Canyang Optoelectronics Ltd.	(378,190)	(2)	(11,851)	-	(38,419)	-	-	–	-	-	-	-	
Luxlite (Shenzhen) Corporation Limited	1,425,371	9	-	-	775,081	1	-	–	-	-	-	-	
Episky Corporation (Xiamen) Ltd.	768,584	5	29,708	3	335,714	1	2,518,320	–	1,824,000	861,000	5.53%	-	
Episky Corporation (Xiamen) Ltd.	(287,519)	(2)	-	-	(50,045)	-	-	–	-	-	-	-	
Epicrystal Corporation (Changzhou) Ltd	449,614	3	16,405	2	83,183	-	-	–	-	-	-	-	
Epicrystal Corporation (Changzhou) Ltd	(1,230,596)	(8)	(11,839)	-	(497,916)	(1)	-	-	-	-	-	-	