Stock code : 000413,200413

Abbreviation: Tunghsu Optoelectronic, Tunghsu B

Announcement No.: 2019-080

Tunghsu Optoelectronic Technology Co., Ltd.

The Summary of 2019 Semi-annual Report

August 2019

I. Important Notice

The summary is abstract from full-text of annual report, for more details information, investors should found in the full-text of annual report that published on website of Shenzhen Stock Exchange and other website appointed by CSRC.

Non-standard audit opinion tips

 \Box Applicable \checkmark Not applicable

The board discussed reporting period ordinary shares profit distribution plan or provident fund to share capital plan

 \Box Applicable \checkmark Not applicable

The board approved this reporting period preferred shares profit distribution plan

 \Box Applicable \checkmark Not applicable

II. Company Information

1. company profile

Stock abbreviation	Tunghsu Optoelectronic, Tunghsu B	Stock cod	le	000413、200413
Stock exchange for listing	Shenzhen Stock Exchange			
Contact person and contact manner	Board secretary		Securities affairs Representative	
Name	Gong Xin		Wang Qingfei	
Add			et, No.1 Caiyuan Street, Xicheng Distric Beijing	
Tel	010-63541061		010-63541061	
E-mail	gongxin_dx@126.com		wangqingfei@dong-xu.com	

2. Summary of Accounting Data and Financial Indicators

Indicate by tick mark whether the Company needs to retroactively restate any of its accounting data.

 \Box Yes \sqrt{No}

	Reporting period	Same period of last year	Changes of this period over same period of last year
Operating Gross income (Yuan)	8,475,089,222.93	11,129,851,790.88	-23.85%
Net profit attributable to the shareholders of the listed company (Yuan)	844,176,169.98	858,296,089.08	-1.65%
Net profit after deducting of non-recurring gain/loss attributable to the	778,095,326.66	811,345,478.77	-4.10%

shareholders of listed company (Yuan)			
Cash flow generated by business operation, net (Yuan)	594,348,068.16	83,617,287.66	610.80%
Basic earning per share(Yuan/Share)	0.15	0.15	0.00%
Diluted gains per share(Yuan/Share)	0.15	0.15	0.00%
Net asset earning ratio (%)	2.57%	2.74%	-0.17%
	As at the end of the		Changes of this
	reporting period	As at the end of last year	period-end over same period-end of last year
Gross assets (Yuan)			period-end of last year

3. Shareholders and shareholding

In Shares

			Total preference				
Total number of common	371,574(includ ing 354,540		shareholders with the				
shareholders at the	shareholdders hodi	ngA shares	and	voting pow	ver recovered at		0
period-end	17,034 shareholders ho	olding B sha	res)	the end of	the reporting		
				period(if a	ny) (note 8)		
	Shares he	d by the top	10 s	hareholder	S		
					Amount of	Pledging	or freezing
Shareho lder name	Properties of shareholder	Share proportion	Ç	Juantity	tradable shares with Conditional held	Status of the shares	Status of the shares
Tunghsu Group	Domestic Non -State-owned legal person	15.97%	9	15,064,091	352,006,791	Pledge	775,563,042
Shijiazhuang Baoshi Electronic Group Co., Ltd.	Domestic Non -State-owned le <i>g</i> al person	5.80%	3.	32,382,171			
Shanghai Huimao Enterprise Management Co., Ltd.	Domestic Non -State-owned legal person	4.58%	20	62,626,262	262,626,262	Pledge	80,240,722
Minsheng Royal Fund Management Co., Ltd— -Ping An Bank-Daye Trust Zengli 2 single Fund	Other	1.63%	9	93,363,625			

Trust						
Tunghsu Optoelectronic Technology Co., Ltd.—The first ESOP	Other	1.27%	72,639,296			
Beixin Ruifeng Fund— China Merchants Bank— Daye Trust—Daye Trust Profit increase 3 single fund plan	Other	1.08%	62,095,032			
Shenzhen Taianer Information Technology Co., Ltd.	Domestic Non -State-owned legal person	1.07%	61,165,682		Pledge	55,265,682
Zhonghai Trust Co., Ltd.— Zhonghai Trust—Tunghsu Optoelectronic ESOP pooled Fund trust	Other	0.92%	52,555,280			
Kunshan Development Zone State-owned Investment Holding Co., Ltd.	State-owned legal person	0.73%	41,838,269			
Yan g Haihui	Domestic natural person	0.55%	31,767,200			
Explanation on shareholders margin trading business	participating in the	Among the top ten shareholders, Tunghsu Group, Baoshi Group and Yang Haihui have relationship and constitute persons taking concerted action. The company does not know whether there is relationship between other 7 shareholders or whether they are person taking concerted action defined in Administrative Measures Relating to Acquisitions of Listed Companies.			ting here is y are persons	
Notes to the shareholders inv securities (if any)	volved in financing	Not applicable				

4. Change of the controlling shareholder or the actual controller

Change of the controlling shareholder in the reporting period

 \Box Applicable $\sqrt{}$ Not Applicable

There was no any change of the controlling shareholder of the Company in the reporting period.

Change of the actual controller in the reporting period

 \Box Applicable $\sqrt{}$ Not applicable

There was no any change of the actual controller of the Company in the reporting period.

5. Statement of preffered shares held by top 10 shareholders

 \Box Applicable $\sqrt{\text{Not applicable}}$

Report period has no preffered shares statement

6.Corporate Bond

Whether the company has corporate bonds that have been publicly issued and listed on the stock exchange, and not yet due or due but not folly cashed on the approval date of annual report Yes

(1) Basic information of the corporate bonds

Bond Name	Abbreviated Bond Name		Date Due	Bond Balance(RMB'0 000)	Interest Rate
2015- corporate bond of Tunghsu Optoelectronic Technology Co., Ltd	15 Tunghsu bonds	112243	May 19,2020	95,355.8	6.80%

(2) Financial indicators to the end of the reporting period

Ten Thousands yuan

Items	As at the end of the reporting period	As at the end of last year	YoY+/- (%) he same period
Debt ratio	52.41%	53.95%	-1.54%
Items	Reporting period	The same period of last year	At the same time rate of change
EBITDA interest coverage ratio	3.51	3.44	2.03%

III. Operation situation discussion and analysis

I .Main Business the Company is Engaged in During the Report Period

Whether the company needs to comply with the disclosure requirements of the particular industry No

In the first half of 2019, under the boost of the "steady growth" policy and a series of reform measures, the Chinese economy successfully resisted the impact of multiple downside risks, and the economy showed a slow and stable pick-up performance. However, as the uncertainty of Sino-US trade disputes increases, the global economic downturn is obvious, and ensued with zero interest rate or negative interest rate policies, the overall economic fundamentals in particular from the second quarter tend to have a striking feature of decline. Under this situation, the company closely follows the development orientation of national policies, seizes the new connotation of important strategic opportunities, actively enhances the ability of scientific and technological innovation, revs up the green development, and transforms the pressure of accelerating high-quality economic development into a driving force, solid develops the industry and deeply focuses on development of the fields including the high-technology, semiconductor, new materials and equipment manufacturing.

During the reporting period, in one respect, the Company solidly cultivated the existing industrial

structure, focused on technological innovation, meticulously developed the business and products, promoting development through R&D, adhere to quality and efficiency, and on the other respect, it optimized management and personnel structure, reduced the costs and increased the efficiency, thus improving the business performance. In terms of refined management, the Company adheres to the "1+5" all-round target incentive mechanism, further highlights the strategic leading position of technology and product research and development, and takes the comprehensive budget management and financial management analysis as a platform, and builds the cadre management system and the enterprise culture as the cornerstone; with focusing on endogenous development and internal potential tapping, implementing the enhanced assessment and incentives, and with continuous optimizing of organizational configuration and organizational effectiveness, the increasingly strengthening of external market development and industrial synergy, it has revved up the capability of revenue generation, profitability, efficiency and core competition. In the first half of 2019, all aspects of the Company's production and operation were steadily advanced, gained with a certain degree of economic benefits. During the reporting period, the Company achieved the operating income of 8.475 billion yuan and realized a net profit of 844 million yuan attributable to shareholders.

The company's each business development status in the first half of 2019:

1. Photoelectric display material business system

(1) Consolidate the main business to achieve stable development and strengthen the leading position of LCD glass substrates

From the Company's 5th generation of liquid crystal glass substrates to the 8.5th generation of glass substrates, the Company possesses a total of more than 20 production lines, which provides a full range of glass substrate products for downstream panel customers. Utilizing the advantages and fitting the trend, the Company has solidly improved the yield of high-generation glass substrate production lines and increased the market share. At present, the Company's products have been widely purchased by mainstream panel companies such as BOE, Shen Chao Optoelectronics and Longteng Optoelectronics, which are used in various display terminals such as portable display, car LED display, computer and home appliances. During the reporting period, the Company optimized and adjusted the industrial structure of glass substrates and revved up the technological innovation to further consolidate the Company's core competitiveness in the field of glass substrates.

(2) Distinguished Quality improvement, for providing a solid base to promote the OLED flexible display industry

Fitting the trends, based on its own technological advantages, the Company has deeply ploughed its technology research and development and innovation, promoting the high-aluminum cover glass substrate products used in the flexible display field, and it has gradually entered a good position, with the production line has entered a period of rapid development and the capacity of high-aluminum cover glass substrate ranked first in China, third in the world. During the reporting period, relied on the Company's high-end equipment manufacturing capabilities, the Company's subordinate company-Xu Hong Optoelectronics carried out the independent research and development, and now it has owned the completely independent intellectual property rights, with a good quality production technology. The product has fully covered the cover glass products ranging from the thickness of 0.1-6mm, with the overall product line has a comprehensive yield of 97%-which far exceeds the industry average of 80%. The cover glass and curved glass has

achieved a balanced ratio. It has become an important step for the Company to successfully deploy the OLED display industry.

(3) Active industrial chain extension and distinct industrial cluster effect

The Company's subordinate company-Tengda Optics continues to expand its optical film business scale and market share by relying on continuous deepening cooperative relationship with BOE. During the reporting period, in terms of scale, it closely followed the layout of BOE's industry, and built new plants in Chongqing and Mianyang to supply BOE. From the product, it had strengthened the research and development capabilities, gradually extended from the TFT product field to the OLED flexible display field, and the number of applicable optical films was increased sharply, as well as providing BOE with the related materials, thus laying a technical and market foundation for the Company's sustained and stable development. The Company further put efforts internally and externally in the color filters and consolidated the market competitiveness. During the reporting period, upon the continuous improvement of production line technology and quality level, it actively carried out the new product development and customer certification. At present, the Company has established stable cooperative relations with customers including INES and IVO. The sapphire products closely followed the LED industry on the large-size development trend. During the reporting period, the Company actively implemented the large-size product technical transformation, expanded the production capacity of 4-inch substrate products, and timely met the changes in the product demand structure by downstream customers, thus providing a solid basis for the Company's stable operation.

(4) Vertically advancing the integration and development, continuing to promote the graphene industrialization

By continuously optimizing the product design, the Company strives to create the star products. As the core industry of Tunghsu Optoelectronic' second take-off development, the graphene industry has been strategically defined with leading path of various graphene preparation technologies and the realization of high value-added industrial application development such as "lampwick". The Company's controlling subsidiary-Mingshuo Technology has become one of the first six companies selected as responding to the national brand strategy-"New Action for National Brand Engineering and Service Industry by Xinhua News Agency". Meanwhile, the first self-developed Industry pioneering-"Graphene cooling LED tube" was awarded the "Aladdin Lamp Award-" which is regarded as the Oscar of the domestic lighting industry-upon its outstanding originality and technological advancement, which was graded first in the review and final review, and its market sales have reached new highs. In addition, the Company's international cooperation with Manda continued to advance and became the first member of China's first Manda Graphene Engineering Innovation Center. Cooperated with the team of Mandano Award scientists, by jointly shared the equipment and resources, it has jointly promoted the graphene technology and incubated the graphene industrialization of related products. Meanwhile, the Company seized the development opportunities, timely adjusted its development strategy and sales strategy, launched several EMC projects in a timely manner, and it combined with new opportunities in the capital market for striving for greater development of the graphene industry. With the application of relevant key technical achievements, the graphene industrialization application sector is expected to maintain a strong growth momentum and to contribute the profits to the listed company.

2. Smart manufacturing business system

Be honest and faithful and keeping doing a good job in development, continues to steadily develop the equipment and technology

In recent years, the Company's high-end smart equipment has been deeply cultivated and steadily developed in the fields of optoelectronic industry chain, semiconductor equipment and other general-purpose equipment, which has been benefited from the integration of two technologies and the promotion of smart manufacturing policies. During the reporting period, the Company consolidated its development strength and achieved the development of its own equipment technology and industrial upgrading based on the customers' system requirements for products and supporting equipment. By utilizing the advanced technology and the complete system of high-end equipment manufacturing capabilities, it further promoted the high value-added business, which has gained a good reputation and stable partners in the domestic high-end customer field. The company expands its multi-dimensional intelligent manufacturing business, develops towards the direction of smart, high-end, green and integrated, and having a good lay-out of production of smart robots, thus to further accelerate the deep expansion and development of high-end smart manufacturing.

3. New energy vehicle business

Forward-looking concept and synergy with the main business, deepen the harmonious development of the new energy automobile industry

Under the reshuffle effect of the industry brought by the new energy subsidy policy, the Company's new energy vehicle sector been steadily increasing. The company strives to build a new force in the industry landscape. Under the Company's forward-looking concept and collaborative development for promoting the energy revolution, it deeply cooperates with Yihuatong to seize the hydrogen fuel bus development opportunities and meanwhile shapes up the hydrogen fuel cell development technology, thus to further improve the industrial synergy effect of the Company's new energy vehicle business. During the reporting period, in the 5th batch of "Recommended Models for Promotion and Application of New Energy Vehicles" issued by the Ministry of Industry and Information Technology, the number of selected models of Shenlong Bus accounted for a percentage of 21.1% in the total number of selected models, nearly 1/4 of the total number of models and ranked the top place, and also the total number of selected models that meet the latest subsidy technical standards for 2019 ranked second in the industry. In addition, the Company has been actively accelerating the construction of the new energy automobile industry base, thus to provide a guarantee for the healthy development of the Company's new energy industry cluster. While striving to develop the business, as the scale grew in the business development stage, the Company promptly started to strengthen the business-related auto finance work, thus laying the foundation for the further healthy development.

4. Other value-added services

Stable and sound development, construction and installation business and electronic communication business are conducive to promote profitability

As a supplement to the Company's main business, the construction and installation business involves smart cities, sponge cities, municipal infrastructure, underground integrated pipe corridors, industrial plants, land consolidation and many other fields. With the smart domestic cities development and the continuous improvement of industrialization level, the construction and installation business has been increasingly innovated, meanwhile which cooperates with other core

industries of the Company to expand business space in new materials, energy conservation and environmental protection and other fields to promote the Company's sustainable development with smart products and quality services. The electronic communication products business continued to grow rapidly during the reporting period, and by utilizing the Company's various industry business customer resources, it further broadened the sales and contributed to improve the Company's operating income.

2. Maters related to financial report

(1) Reason for changes in accounting policies, accounting estimates and accounting methods as compared to the financial report for the prior year

 $\sqrt{\text{Applicable}}$ \square Not applicable

Contents and causes for changes of accounting policy	Approval procedures	Remarks
On April 30, 2019, the Ministry of Finance issued the Notice on	The company will hold the	
Revising and Issuing the Format of Financial Statements for General	3rd meeting of	
Enterprises in 2019 (CK [2019] No.6), which revised the format of	Ninth board meeting and the	
financial statements for general enterprises and is applicable to the	2nd meeing of ninth meeing	
interim financial statements and annual financial statements for	board of supervisors on	
non-financial enterprises in 2019 and the financial statements for	August 30,2019 to review and	
subsequent periods that implement the Accounting Standards for	approve the Notices on the	
Enterprises.	change of accounting policy.	
On March 31, 2017, the Ministry of Finance issued revised		
Accounting Standards for Business Enterprises No.22-Recognition		
and Measurement of Financial Instruments (CK [2017] No.7),		
Accounting Standards for Business Enterprises No.23-Transfer of	The company will hold the	
Financial Assets (CK [2017] No.8) and Accounting Standards for	3rd meeting of	
Business Enterprises No.24-Hedge Accounting (CK [2017] No.9).	Ninth board meeting and the	
The revised Accounting Standards for Business Enterprises	2nd meeing of ninth meeing	
No.37-Presentation of Financial Instruments (CK [2017] No.14)	board of supervisors on	
(collectively referred to as "New Financial Instrument Standards")	August 30,2019 to review and	
was issued on May 2, 2017, requiring domestic listed enterprises to	approve the Notices on the	
implement it from January 1, 2019. The revised Accounting	change of accounting policy.	
Standards for Business Enterprises No.7-Exchange of Non-monetary		
Assets (CK [2019] No.8) is implemented on June 10, 2019, and the		
revised Accounting Standards for Business Enterprises No.12-Debt		
Restructuring (CK [2019] No.9) is implemented on June 17, 2019.		

Accounting policy changes arising from the implementation of the new accounting standards for business enterprises

On April 30, 2019, The Ministry of Finance issued the Notice on Amending the Format of Financial Statements of General Enterprises in 2019 (CK No. [2019] 6).

The impact of the company's implementation of this accounting policy on the items and amounts presented in the previous financial statements is as follows:

Name of affected item in the statements	Affected amount of December 31, 2018 / 2018
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	Increase + / decrease
Notes receivable	+499,781,503.17
Account receivable	+14,352,781,895.39
Notes receivable & account receivable	-14,852,563,398.56
Notes payable	+1,643,167,026.68
Account payable	+8,632,927,106.20
Notes payable & Account payable	-10,276,094,132.88

From January 1, 2019, the company starts to implement the new financial instrument standards. This accounting policy change does not involve retrospective adjustment of previous years and does not affect the company's relevant financial indicators in 2018.

(2)Reason for retrospective restatement to correct major accounting errors during the reporting period.

 \Box applicable \checkmark not applicable

No such cases in the reporting period.

(3) Reason for changes in scope of the consolidated financial statements as compared to the financial report for the prior year.

 \checkmark applicable \square not applicable

On June 30, 2019, 25 subsidiaries and 97 sub-subsidiaries were included in the consolidation scope by the company (Including: 12 new Sub-subsidiaries companies were added, 2 were disposed of and 3 were cancelled) For details, please refer to Section 10 of the company's 2019 semi-annual report, financial report Note IX, "Equity in other entities".

Tunghsu Optoelectronic Technology Co., Ltd.

Chairman: Wang Lipeng

Issue day approved by the Board of Directors: August 30,2019