

VII. Discussion and Analysis of Financial Status and Operating Results and Risk Management

1. Financial Status

Nonconsolidated Financial Statements

Item \ Year	2022	2021	Difference	
			Amount	%
Current Assets	\$ 49,776,657	\$ 51,958,614	(\$2,181,957)	(4.20)
Investment	447,117	508,679	(61,562)	(12.10)
Real estate, Plant & Equipment	64,818,236	63,236,697	1,581,539	2.50
Intangible Assets	1,125,632	982,640	142,992	14.55
Other Assets	2,801,496	1,900,392	901,104)	47.42
Total Assets	118,969,138	118,587,022	382,116	0.32
Current Liabilities	19,614,752	23,319,131	(3,704,379)	15.89
Long-term Liabilities	33,031,348	31,961,649	1,069,699	3.35
Total Liabilities	52,646,100	55,280,780	(2,634,680)	(4.77)
Capital Stock	7,591,466	7,791,466	(200,000)	(2.57)
Capital Surplus	149,540	270,794	(121,254)	(44.78)
Retained Earnings	45,551,199	43,573,846	1,977,353	4.54
Other shareholders' Equity	(534,445)	(710,623)	176,178	24.79
Treasury Stock	(468,802)	(1,418,300)	949,498	(66.95)
Equity Belong to Parent Company	52,288,958	49,507,183	2,781,775	5.62
Non-Controlling Interests	14,034,080	13,799,059	235,021	1.70
Total Shareholders' Equity	66,323,038	63,306,242	3,016,796	4.77
Reason for Major Difference:				
1. Increased of other assets: increase of refundable deposits.				
2. Decrease of capital surplus: cancelation of treasury stocks.				
3. Increase of other shareholders' equity: increase of 2022 overseas subsidiaries exchange gains.				
4. Decreased of treasury stock: cancelation of treasury stocks.				
Note: The listed numbers were from consolidated report and audited by CPA using IFRS.				

2. Operating Results

(1) Comparison and Analysis Table for Operating Results for Last Two Years

Nonconsolidated Financial Statements

Unit: NT\$ Thousands

Item	Year	2022	2021	Increase (Decrease)	Difference (%)	Analysis
Net Sales		\$ 83,926,735	\$ 83,793,572	\$ 133,163	0.16	
Cost of Sales		66,550,715	64,498,915	2,051,800	3.18	
Gross Profit		17,376,020	19,294,657	(1,918,637)	(9.94)	
Operating Expenses		4,928,003	4,769,711	158,292	3.32	
Operating Income		12,448,017	14,524,946	(2,076,929)	(14.30)	
Non-Operating Income/Expenses		1,191,909	180,541	1,011,368	(560.19)	1
Net Income Before Tax		13,639,926	14,705,487	(1,065,561)	(7.25)	
Income Tax Expense		2,888,077	2,979,562	(91,485)	(3.07)	
Net Income		10,751,849	11,725,925	(974,076)	(8.31)	
Analysis of Difference over 20%						
1. Increase on non-operating income: gain from foreign exchange.						
Note: The listed numbers were from consolidated report and audited by CPA.						

(2) Revenue Forecast and Financial Impact:

See 2022 Operation Report for details.

3. Cash Flow

(1) Cash Flow Analysis for 2022

Unit: NTS Thousand

Beginning Cash Balance 1/1/2022	2022 Cash Flow from Operating Activities	2022 Cash Flow from Investing Activities	2022 Cash Flow from Financing Activities	Currency Exchange for Cash and Cash Equivalent	Ending Cash Balance 12/31/2022
22,922,620	24,649,382	(18,927,395)	(6,760,954)	524,920	20,373,424
2022 Cash Flow Analysis : (1) Operating Activities: Increase cash inflow from change in 2022 depreciation and profit. (2) Investing Activities: Increase of cash outflow was due to acquisition of real estate, property and equipment in 2022. (3) Financing Activities: The increase of cash outflow was due to change in cash dividends payout and bank loan payment in 2022.					

(2) Cash Flow Improvement Plan

Not applicable.

(3) Cash Flow Estimation for 2023:

Unit: NTS Thousand

Beginning Cash Balance 1/1/2023	Estimated 2023 Cash Flow from Operating Activities	Estimated 2023 Cash Outflow	Estimated Ending Cash Balance 12/31/2023	Funding for Cash Flow Shortage	
				Investing Activities	Finance Activities
20,373,424	20,000,000	(20,000,000)	20,373,424	—	—
1. 2023 Cash Flow Analysis: (1) Operating Activities: The cash inflow is from 2023 estimated net income and depreciation. (2) Investing Activities: The cash flow is for acquisition of real estate, property, and equipment in 2023. (3) Financing Activities: The cash flow is for 2023 cash dividends payout and payback bank loan. 2. Funding for Cash Flow Shortage: Not Applicable.					

4. Effects of Major Capital Expenditures on Financial Status in Most Recent Year

(1) Major Capital Expenditures and Sources of Capital

Majority of 2022 PTI capital expenditures were for acquiring real estate, property and equipment. The sources of capital were from the Company's own funds and bank loans. In order to stay competitive, PTI has constantly devoted on production efficiency modification, new technology research, upgrade equipment, and capacity expansion to meet customer satisfaction.

5. Investment Policy in Recent Years, Main Causes for Profits or Losses, Improvement Plans, and Investment Plans for the Coming Year

PTI's investment policies conform with its strategies of deep cultivation of core business, strengthening of strategic alliance relationships with major clients and expansion of related industries, excepting to increase return on equity through the investment gains.

Investment Commission had approved no more than US\$51 million investment through Powertech Holding (BVI) Inc. for subsidiary Powertech Technology (Suzhou) Ltd. (PTI Suz) for further expansion in China in 2009. Total investment for PTI Suz was US\$216 million and register capital was US\$72 million. As of end of 2019, PTI Suz accumulated lost was over US\$54 million which was over half of register capital. PTI Suz financial performance has not met expectation after a decade. Supply chain swift from trade tensions and local made incentives from China government created a favorable condition for operations in China. PTI HQ assigned new management team to undergo a serious leadership revolution for PTI Suz and continue funding its operation by increase capital of US\$ 28 million. The capital increased was approved by Apr 2020 board meeting. PTI Suz was expected to improve its financial status with new leadership and favorable operations condition.

Board meeting in Aug 2020 concluded to end the operations of Powertech Technology Akita Inc. due to its poor financial performance and limited foreseeable opportunity.

Board meeting in Aug 2020 concluded to end the operations of Powertech Technology (Singapore) Pte. Ltd. due to its poor financial performance and transformed to holding function of Powertech Semiconductor (Xian) Co. Ltd. and Powertech Technology (Suzhou) Ltd. In Jul 2022 Board meeting had concluded for capital reduction. Filing of reduction was completed in Aug 2022. Powertech Technology Inc. had received returned capital US\$16 m in Sep 2022. Future investment plan will justify with industry condition and potential growing opportunities. Under the direction of strengthen the relationship of alliance and supply chain networking, the Board of Directors will carefully consider all the investment proposals.

6. Risk Analysis and Assessment in the Recent Year and as of Publication Date of Annual Report

(1) Effects of Changes in Interest Rates, Foreign Exchange Rates and Inflation on Corporate Finance, and Future Response Measures:

1. Interest Rate

The semiconductor packaging and testing industry where our company is in is capital intensive therefore large fund is required for the Company to invest into fixed assets. Besides the Company's own funds, the sources of the Company's funding are primarily bank loans, thus the Company's profitability is affected by interest rate movement. To minimize this risk, PTI compares the level of interest rates of its bank loans on a regular basis with market average rate and negotiate timely with the correspondent banks to obtain better interest rates to ensure the financing costs are at comparatively low level.

2. Foreign Exchange Rate:

(1) Effects

Exportation account for 70.07% of 2022 PTI's net sales, so the majority of trade were conducted in foreign currency and US dollars is the most common currency used. Majority of equipment and raw materials were mainly trade in US dollars and Japanese yen as well. Both import and export were affected by currency exchange rate fluctuate. 2022 net foreign exchange lost were about NT\$ 151.0 million.

(2) Future Response Measures

- Foreign currencies from exporting income balance out with importing expenses which creates mutual hedging effects to eliminate exchange rate risks.
- Finance staff collected information regarding changes of foreign exchange rates, including supply and demand of foreign currencies, monetary tightness condition of the correspondent banks, and trend analysis of exchange rates, which will then serve as reference information to respond to future exchange rate movements.
- To timely purchase foreign currencies based on the Company's future foreign currency requirements, in order to determine the cost and reduce the impact of movements in exchange rates.
- To use the bank credit at the right time to convert foreign currency loans to NT dollars borrowing.
- To apply financial instruments such as derivatives of forward exchange to avoid the risks of changes in exchange rates leading to exchange loss on assets, liabilities and future transactions denominated by foreign currencies.

3. Inflation:

No significant impact of inflation on the PTI's profitability and business operations in 2022.

- (2) Policies, Main Causes of Gain or Loss and Future Response Measures with Respect to High-risk, High-leveraged Investments, Lending or Endorsement Guarantees, and Derivatives Transactions:

1. PTI has not engaged in any high-risk or high-leveraged investments.
2. PTI proposed and approved by board to authorized Chairman to lend Powertech Technology (Singapore) Pte. Ltd. US\$50 m in 2014. Board had reduced the endorsement and guarantees limit to US\$30 m in Mar 2016 after review its funding needs. The subsidiary had fully payback its debt and removed the endorsement liability. As the date of printing, PTI has no endorsement liability.
3. 9th Annual 8th Board meeting on Nov 5, 2021 approved to lend Powertech Technology (Suzhou) Ltd. no more than US\$15 million for the period no longer than 1 year with estimated annual interest rate at 1.0%. Powertech Technology (Suzhou) Ltd. had borrowed US\$11m (NT\$257,598,000) during the period and outstanding balance and interested were fully satisfied by the end of 2022. Base on the “Procedures for Lending Funds to Others”, lending amount must stay under 5% of net worth for each transaction and 10% for accumulated transaction. The Company net worth was NT\$52,289 m as the end of Dec 31 2022; therefore, lending amount meet the guidance with no more than NT\$2,614 m for each transaction and NT\$5,229 m for accumulated transaction.
4. No major currency exchange gain or loss from currency investment as of the date of printing.

(3) Future Research and Development Plans and R&D Expenses from Expected Investments

The Company has put much emphasis on the development of talents since its establishment. Setting up a R&D department in 1998 and the R&D technology center in 2006, PTI has continually introduced new processes and technologies of packaging and testing. To adapt to the future semiconductor memory device trend towards being versatile, high-speed, highly reliable and high density and the development of new products of our customers, PTI will proactively develop and introduce new technologies in the future. PTI R&D budget is about NT\$2.07 billion for 2023.

(4) Effects of and Response to Changes in Policies and Regulations Relating to Corporate Finance and Sales.

PTI has always pay close attention to any international and domestic policies changes, and PTI will make appropriate modifications to the operating systems when necessary. As of the publication date of this annual report, there is no significant change or impact of law on PTI's operations.

(5) Effects of and Response to Changes in Technology and in Industry Relating to Corporate Finance and Sales:

The semiconductor industry, where PTI belongs to, is under rapid changes in products and technology. To adapt to these rapid changes, PTI needs to upgrade its processes and

develop new technologies constantly, upgrade its equipment, and expand its capacities in a timely manner. To reduce the risks of overexpansion at the same time keep up with the product development trend, PTI has established collaborative relationships and co-op with strategic alliances with major customers to develop advanced technology capabilities. In addition, PTI has invested in related industries to form a complete supply chain network and diversify the risks caused by market changes. PTI also strengthen its cost control and cash management skills to maintain competitiveness and eliminate the impacts of changes in technology and in industry relating to corporate finance and sales.

PTI has implemented measures to protect the information security of our networks and computers. There are also established rules and procedures for information security risk management.

1. Different assets may face different risks. Methods for assessing or calculating asset value were adjusted to make them more appropriate to the nature of the unit.

2. The basic information security requirements are data confidentiality, integrity and usability. These ensure the appropriateness and effectiveness of related regulations and processes.

3. Information security insurance is an emerging risk type that involves information security rating organizations, claim assessment organizations, and no-compensation clauses. To mitigate potential losses due to information security incidents, information security insurance policy with up to US\$5 million in coverage was purchased by PTI in 2022.

(6) The Impact of Changes in Corporate Image on Corporate Risk Management, and the Company's Response Measures:

Since the establishment of the Company, PTI has consistently maintained an ethical business practices, and has actively strengthened its internal and quality management to build up customer trusts. PTI has a good corporate image and there has been no corporate crisis in recent years caused by changes in corporate image.

(7) Expected Benefits from, Risks Relating to and Response to Merger and Acquisition Plans

No plan of merger and acquisition as of the date of printing.

(8) Expected Benefits from, Risks Relating to and Response to Factory Expansion Plans

PTI has been devoted on Fan-Out Panel-Level packages (FOPLP) for packaging solution post Moor's Law. Hsin Chu Science Park Plant III will be dedicated for FOPLP. The new facility finished construction in 2021 and equipment pulled in and trial run started from Oct 2021. No facility expansion as of the report date.

(9) Risks Relating to and Response to Excessive Concentration on Supply Sources and

Customer

The supply sources and major customers of the Company have been disclosed in related sections of this report. As the concentration level of the upper stream memory IC markets gets intense, sales of the downstream packaging and testing providers will get more concentrated. PTI has proactively developed new customers, collaborative relationships, and strategic alliances with existing customers to eliminate the highly customer concentrated risks. PTI has also actively reached out to non-memory IC packaging and testing business. The results are noticeable. In terms of supply sources, PTI has been actively seeking qualified alternative suppliers to reduce the risks of excessive concentration.

(10) Effects, Risks, and Solution for Share Transfers of Shareholders with 10% Or More Shares: None

(11) Effects, Risks, and Solution of Changes in Control over the Company: None.

(12) For litigation or non-litigious matters, clearly state if the Company or the Company's directors, supervisors, president, actual person in charge, shareholders with 10% shareholdings or more, and affiliated companies that have been concluded or pending major litigations, non-litigation or administrative litigation matters, whose outcome may have major impact on shareholders' equity or securities prices:

1. The Company's major litigations, non-litigation or administrative litigation matters: None.

2. Major litigations, non-litigation or administrative litigation matters of the Company's directors, supervisors, president, actual person in charge, shareholders with 10% shareholdings or more and affiliated companies: None.

(13) Other Important Risks and Remedies: None.

7. Other Important Matters: None.