



# 2023 Sustainability Report

TTY Biopharm Company Limited

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Since 1960, TTY has been committed to navigating the evolving landscape of medical science and advancing bio-tech pharmaceutical developments. In recent years, TTY has focused on the technical platform for complex generic formulations as a means to fortify our independent capabilities to produce new drugs. It is our mission to improve the quality of human life with scientific innovation as part of our commitment to corporate social responsibility. These achievements have not only established a good foundation for our future, but reflect the successful story of a Taiwan business entering the global arena.

> Under the leadership of CEO Sara Hou, TTY has focused on international expansion with detailed developmental goals. The current key focus is consolidating our corporate culture with integrity, accountability, professionalism, and compliance. This is essential for operational sustainability and to keep TTY on the right path. As the chairman of TTY, I will work with our management team to embrace business transformation. I believe our professional managers are able to pursue excellence and drive the business to international horizons and achieve even greater success.

With the vision of "improving the quality of human life with scientific innovation" in mind, we are focused on the concerns of people. Our ESG roadmap starts from the demands of stakeholders and 3 major areas – Steady Development of the Company, Realization of a Healthy Society, and the Promotion of the Green Transformation. We aim to create value for stakeholders, solutions for medical and patient relationships, and fulfill our corporate social responsibility.

> To ensure Steady Development of the Company, our strong foundation for complex generics development, self-developed quality of new formulas, and reliable pharmaceutical distribution capabilities have led us to positive partnerships in

## With the vision of "improving the quality of human life with scientific innovation" in mind, we are focused on the concerns of people.

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filling ASEAN, US, and EU demands, contributing to the international market with MIT scientific strength. To establish a healthy corporation, our diverse board members, legally compliant practices, and sound trainings fully support the honesty and ethics of the brand. As a corporation, we will continue to grow through corporate governance, including promoting a strong corporate culture among our staff members, implementing TCFD, receiving ISO 45001 certification, and being in the top 5% of OTC companies for the 7th year in a row in the 2023 Listed and OTC Evaluation System. All of these achievements demonstrate our ambition to be a steadily developing enterprise.

Health and People are 2 important elements of TTY. We are committed to promoting these 2 values in our business operations, from personal hygiene education, providing services to social organizations, public healthcare, and disease prevention, to the development of health-related bio-tech manpower. In terms of Realization of a Healthy Society, we have organized the Regional Care for the Cancer-affected Healthcare Education Project for over 20 years, and participated in more than 40 school promotions in 2023. The three-year toxic-free rice purchase project is now in its 2nd year since it was launched in 2022, and aims to promote the idea of "you are what you eat" with charity organizations through rice donation. Our volunteers have also partnered with NGOs to promote health topics.

Our Summer Internship Program also celebrated its anniversary of 15 years since its establishment. The program aims to cultivate biotech talent for Taiwan and is now known to many local and international academic departments.

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To strengthen our national healthcare system, we donated imported cellular and adjuvant influenza vaccines to the ICDF and Taoyuan City to protect frontline healthcare workers, NGOs, and vulnerable groups from infectious diseases, and facilitate cross-institutional cooperation by enhancing the life-long health benefits of society.

Environmental sustainability is a priority of all our activities as part of our mission to promote the green transformation. Other than adopting GHG inventory and verification, and process optimization to reduce energy consumption, we have also implemented green procurement, planned to use eco-friendly packing materials, and are reinforcing waste management. In addition to low-polluting green production, our suppliers are required to fulfill our ESG commitment, attracting like-minded corporations to establish a sustainable and green business network.

TTY is focusing on the development of oncology, antibiotics for severe illnesses, vaccine development, and public healthcare. We provide reliable, professional, and diversified medical products and services to our stakeholders, which has made us a leader of biotech pharma in Taiwan. Looking to the future, TTY will leverage our strength and step into the international arena as a representative of corporations from Taiwan. We hope to partner with like-minded overseas businesses to deepen our brand value and impact and become a steady power for the sustainable development of TTY and society as a whole.

> Lin Chuan TTY Biopharm Chairman

## **ABOUT TTY SUSTAINABILITY REPORT**

TTY Biopharm Co., Ltd. ("TTY") has issued a sustainability report for 8 consecutive years. Through this report we demonstrate to all stakeholders as part of our sustainable management goals, performance data and related management methods implemented for corporate governance, maintenance of patients' health and safety, responsible products and manufacturing, environmental protection, supply chain management, and employee care and social welfare. We also propose future improvement goals to implement corporate citizenship through concrete actions.

#### Scope of Reporting

This report covers data from 1/1/2023 to 31/12/2023. The financial statement and data include the headquarters in Taiwan and subsidiaries. The scope of the report covering governance and society are individually presented by the headquarters, Chungli Factory, Lioudu Factory, Pharmaceutical Development Center, Neihu Factory, excluding the Vietnam office and subsidiaries (see TTY's subsidiaries information). The environment aspect (outsourced electricity, energy use, and air pollution data) is mainly based on data provided by the Chungli and Lioudu Factory. The GHG inventory covers the headquarters, Chungli, Lioudu and Neihu Factory, and water, wastes, and toxic substance management are presented by the Chungli, Lioudu and Neihu Factory. The data within the report

pertains to 2023 if not otherwise indicated. No change has been made to the information given since the preceding issue.

#### Issuance Frequency

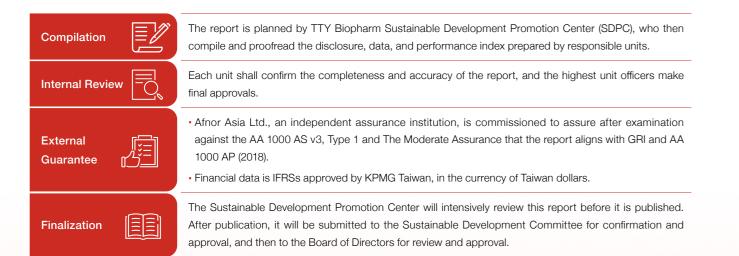
The Company is committed to publishing a sustainability report every year going forward. The last report was published in June 2023 in the Sustainability section of the Company's website for stakeholders to download and review. This report was published in August 2024. The next report will be published in August 2025.

#### **Compilation Guidelines**

This report is prepared under the guidance of the Sustainability Reporting Standards (GRI Standards) 2021. The GRI index is listed in the Appendix.

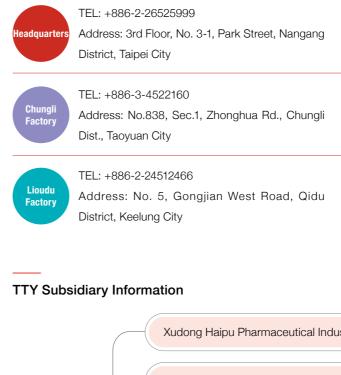
#### Report Quality Control

To strengthen the comprehensiveness and credibility of this report, we have established a sustainability report compilation procedure, internal audit, and outside validation procedures based on the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies.



### **Basic Information**

#### **Operating sites**







TSH Biopharm Co., Ltd. (TSH)

EnhanX Biopharm Inc. (EnhanX)

Chuang Yi Biotech (CYB) Co., Ltd.

#### Information

Please contact the Sustainable Development Promotion Center with any question or suggestions regarding the content of the report.

### TTY Biopharm Co., Ltd.

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Pharmaceutic Development Center

TEL: +886-2-27967383 Address: 3rd Floor, No. 124, Xingshan Road, Neihu District, Taipei City

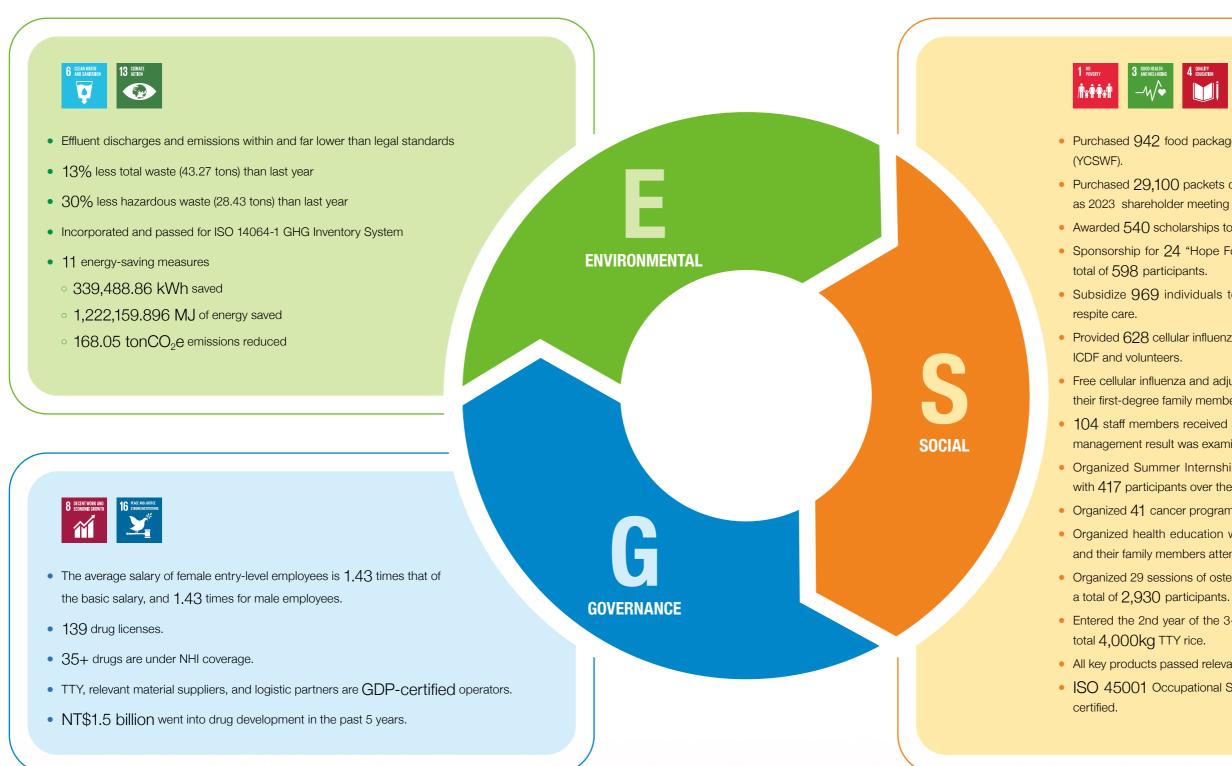
Neihu Factory TEL: +886-2-27967383 Address: 5th Floor, No. 118, Xingshan Road, Neihu District, Taipei City

## Xudong Haipu Pharmaceutical Industry Limited Company (Cayman) (Xudong Haipu)

Worldco Int. Co., Ltd. (HK) (Worldco Int.) American Taiwan Biopharma Philippines

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## **ESG X SDGS ANNUAL REPORT HIGHLIGHTS**





• Purchased 942 food packages produced by Yu-Cheng Foundation

• Purchased 29,100 packets of Himalayan Salt produced by YCSWF as 2023 shareholder meeting souvenirs.

• Awarded 540 scholarships to students of cancer-affected families.

• Sponsorship for 24 "Hope Foundation for Cancer Care" camps. A

• Subsidize 969 individuals to receive hospice care at home and

• Provided 628 cellular influenza shots and adjuvant influenza shots to

• Free cellular influenza and adjuvant influenza shots for 803 staff and their first-degree family members in 2023.

• 104 staff members received special physical checks and no level 3 management result was examined.

• Organized Summer Internship Program for 16 consecutive years with 417 participants over the years.

• Organized 41 cancer programs on remote campuses.

• Organized health education with a total of 6,871 cancer patients and their family members attended.

• Organized 29 sessions of osteoporosis and bone health lectures with

• Entered the 2nd year of the 3-year TTY Rice project, and donated a

• All key products passed relevant health and safety compliance.

• ISO 45001 Occupational Safety and Health Management System



# CHAPTER SUSTAINABLE MANAGEMENT

Sustainable Development Strategies & Performance
Sustainability Topics of Concern Analyzed





ge vendors to adopt anufacturing and actively environmental protection t against climate change. 1 Action Plans Encompassing Climate

2 Green Operations

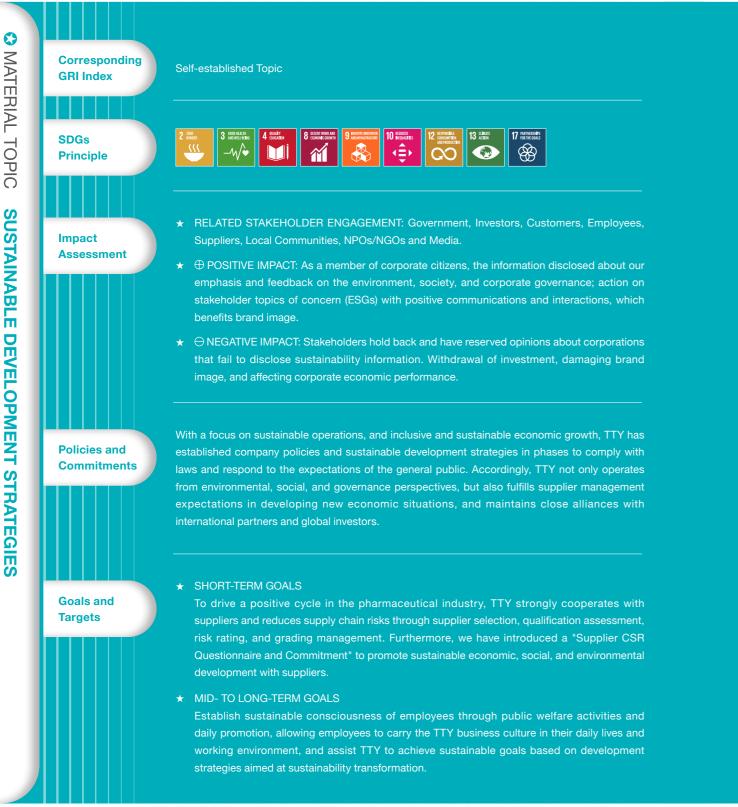
ted to serve the nity with our professional provide medical support hier population.

3 Innovative R&D

4 Healthcare

Good moral practices and good risk management to create a favorable corporate environment for talent cultivation.

- 5 Integrity Operations
- 6 Risk Management
- **7** Talent Development



**Responsibilities** and Resources

Annual Action

Results

The Sustainable Development Committee is subordinated to the Board of Directors, and the Sustainable Development Promotion Center established under SDC, which is in charge of the planning, implementation, and execution of sustainable development policies, systems, and guidelines as well as action plans. The Committee submits reports to the Board of Directors regularly.

development) for detailed information.

- ★ SUSTAINABILITY POLICIES AND MANAGEMENT SYSTEM ISO 45001 OSH management certified and valid until 12/29/2023.
- ★ PROGRESS OF SUPPLY CHAIN SUSTAINABLE MANAGEMENT retrieved 30.16% of released CSR guestionnaire from suppliers.
- ★ AWARENESS OF SUSTAINABILITY
  - 2 environmental sustainability promotions.
- ★ MEDICAL KNOWLEDGE PROMOTION

health.

- 3 cancer information lectures to patients.
- ★ SOCIAL WELFARE PARTICIPATION
  - of local communities.
- used the service within 2021-2023.
- ★ SEE ESG PERFORMANCE AND GOALS FOR THE RESULTS OF THE YEAR.

See Chapter 4 > Governance Structure (SDC) and Governance Principles (promoting sustainable

Supplier CSR Questionnaire and Commitment have been delivered to suppliers. In 2022-2023 we

• All staff completed 7 SDGs online training and corporate ethics online lectures.

• 12 e-letters to all staff and 6 e-letters to factory employees to emphasize the importance of

• 29 speeches to remind and advise sufficient intake of calcium and Vitamin D.

• Matching flu shot needs from ICDF (128 shots) and Department of Public Health (500 shots) with ICDF, Department of Public Health, Taoyuan and CMUH for frontline staff, volunteers and elders

• During the 2nd year of the 3-year TTY Rice project, 4 health-themed events were organized. • In 2023, there are 148 patients covered by daytime hospice service. There has been 969 people

## ESG Performance and Goals

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Environmental	2023 Target	2023 Implementation Results	2023 Achievement	Short-Term Goal 2024	Mid-Term Goal 2025
	2 environmental sustainability promotions every year	"Ocean waste cleaning-new life with plastics reduction" on 12/29. "Climate Action invited people to become energy , GOGOGO!!!" on 8/11.	$\bigotimes$	<ol> <li>Organize 2 environmental sustainability promotions every year.</li> <li>To continue the ISO 14064-1 GHG</li> </ol>	<ol> <li>To continue the management over carbon emission, wastes and water usage.</li> <li>To explore the technologies</li> </ol>
-	<ul> <li>Waste management policy         <ul> <li>waste resources recycling to reach 3 tons in total</li> </ul> </li> </ul>	4.129 tons wastes recycled.	$\bigotimes$	<ul><li>inventory standards and acquire certification.</li><li>3. Waste management policy- waste resources recycling to reach 5 tons in total.</li></ul>	that improve operation-related environmental sustainability, evaluate the purchase of green energy and energy-efficient equipment to minimize eco-impact.
-	<ul> <li>Incorporate ISO 14064-1 inventory standards and pass certification</li> </ul>	GHG Inventory was assured by independent institution on 5/10 and certificate received on 6/7.	$\bigotimes$	4. 2% annual electricity conservation rate.	<ol> <li>Carry out water resources recycling.</li> <li>Paper-free office.</li> </ol>
	<ul> <li>2% annual electricity conservation rate*</li> </ul>	Electricity conservation: Lioudu Factory: 2.03% Chungli Factory: 2.04%	$\bigotimes$		*Note: Considering that in the 2022 report the goal was of which the value reported to MOE was gained saved + annual electricity consumption), he
	• Evaluation for the purchase rate of equipment and products that are eco- labeled	The evaluation report submitted on 10/13 suggested that plastic foldable containers and carton boxes replace corrugated paper boxes.	$\bigotimes$		conservation rate" for precision.
	<ul> <li>Specialist training for toxic chemical substance management</li> </ul>	We have 7 certified toxic chemical substance specialists (of which 6 in Lioudu and 1 in Chungli Site); 4 registered emergency responders for toxic and concerned chemical substances.	Ø		





- echnologies
- eration-related
- ustainability,
- chase of green
- gy-efficient
- resources recycling.

- 1. Green building plan for the future if applicable.
- 2. Establish a green supplier management system to quantify sustainability indicators.
- 3. Join climate initiative organization or alliance, declare environmental sustainability, increase ratio of renewable energy.

e 2022 report the goal was "to conserve 2% more electricity than previous year", ported to MOE was gained from [the annual electricity reduction result ÷ (electricity tricity consumption), here the description rewrites as "2% annual electricity precision.







## Integrated Reporting, IR

Six Major	Capita	al Contribution		Six Major	Capit	tal Contribution
Sources of Capital	Action Concept	Action Plan	Capital Output	Sources of Capital	Action Concept	Ac
Sinancial Capital	TTY has created solid cash flow based on strong manufacturing and sales abilities. In addition to sharing operational results with shareholders, capital is further contributed to new market development, and to introduce quality products via strategic cooperation with international partners as an international enterprise.	Reinforce manufacturing abilities and optimize sales channels with income received from sales, CDMO, and international market development, and introduce research results to the global market following overseas authorization. Focus on the medical environment of target areas, identify unmet medical needs, apply group resources to achieve short-mid- and long-term operational goals, and create the profits expected by stakeholders.	<ul> <li>Market value NTD\$19,991,457 thousands</li> <li>Total assets NTD\$9,874,909 thousands</li> <li>Consolidated revenue NTD\$5,505,542 thousands</li> <li>EPS \$3.5</li> </ul>	Human Resource Capital	TTY publicly appraises employees with long service tenure every year and the salaries of new employees are higher than the base salary standard. TTY does not discriminate salaries based on gender. We also value salary increases and promotion system, allowing employees having opportunity to boost their salary and earn a promotion.	The TTY Univer project connect colleges, gener and new emplo programs for all project has also provide promot outstanding em TTY has an anr plan split into "g and "special sa incentive to inco retain outstand performance bo
	TTY is an international pharmaceutical enterprise with high standards, high quality management	<ul> <li>The Chungli factory passed the GMP/GDP audit of the Taiwan TFDA. During the 2008- 2023 periods, TTY passed 24</li> </ul>	<ul> <li>Annual capacity of the Chungli factory: 600,000~700,000 vials of liposome injections; 2.5 million vials of cytotoxicity</li> </ul>			according to th assessment reg operational cor remuneration to
S Manufacturing Capital	process, and good production management. The manufacturing base is satisfactory to international standards and used to produce pharmaceuticals with highly competitive barriers and high added value on the global market.	<ul> <li>and acquired official GMP verification.</li> <li>The Lioudu factory passed 12 international audits in 4 countries and acquired official GMP verification in year 2013-2023.</li> <li>The Neihu factory has met audit standards for 17 years in a row since year 2007.</li> </ul>	<ul> <li>2.5 million vias of cytotocity oncology injections; 25 million oncology oral capsules.</li> <li>Annual capacity of the Lioudu factory: 350 million oral tablets; 72 million oral capsules; 1.5 million vials of liquid injections; 200,000 vials of lyophilized liposome injections.</li> </ul>	Social Relationship	The TTY charity club "Boshiyuan" calls on volunteers to hold various social service activities, and promote social wellbeing and environmental protection. This club has been instrumental in bringing public welfare to the TTY culture and everyone is welcome to contribute to make the world a better place.	TTY holds the " the Cancer-affe remote campus prevention and every year. It als purchase activi "Boshiyuan" ch Supports Yu-Ci Foundation by j salt as gifts for purchase of tea
	In respect of technology, TTY has enhanced the stability of product quality through continuous innovation and customized production design of the existing successful	In respect of technology, more than a hundred patent applications have been proposed to protect the development of formulations, processes, and functional excipients in synthetic technologies.	By the end of year 2023, a total of 5 invention patents were approved, 206 trademark registrations were approved and 8 trademark applications are under review.	Capital		support the vul adapted into sc The social parti SDPC initiated to promote toxi
Intellectual Capital	platform of long-released specialty dosage to create a win-win between TTY and partners. In respect of intellectual property, TTY firmly follows the Business Secrets Act to protect important core technologies so it can establish a brand within target markets. TTY applies patents to protect all research results and registers trademarks in target product markets.	In respect of intellectual property, we follow registrations and launch schedule to apply for trademark registration of product names and marketing feature designs to block forgery or use of similar product names to establish a company brand and increase product visibility. TTY has applied for approximately 390 trademarks to date. In addition, TTY reviews and eliminates patents and trademarks without value or practical use or protection to reduce maintenance		Nature Capital	TTY has established energy and water-saving policies and plans based on government regulations to examination standards of different countries. TTY is also committed to saving water, improving processing and sewage discharge, and traces and audits waste.	The sewage dis complied with t Control Act, sel of local governr water quality st treatment facto In addition, all c waste contractor for tracing, and audits are conc

#### Action Plan

iversity employee training nects training of 6 major neral knowledge courses, ployee orientation r all staff. A talent retention also been launched to notion opportunities for employees.

annual salary increase o "general salary raises" I salary raises" as an increase productivity and anding talent. Individual e bonuses are distributed o the performance regulations and overall conditions to connect n to performance.

e "Regional Care for affected" program on ouses to promote cancer nd healthcare lectures also organizes group tivities through the charity club.

-Cheng Social Welfare by purchasing Himalayan for shareholders; group tea flavor popcorn to vulnerable groups which social inclusion.

articipation team of the ed the "TTY Rice" project oxic-free farming.

discharged by TTY th the Water Pollution self-governance laws ernments, and incoming y standards for sewage ctories in industrial zones. all clearance vehicles of actors have GPS systems and on-site and vehicle onducted.

### Capital Output

- A total of 508 employees
- Employee turnover rate of 19.49%
- Employee training of 4.58 hours per person on average

- 41 remote campus programs
- 3 physical anti-cancer health lectures in-person were organized in year 2023 with a total of 160 participants.
- 29 healthcare lectures were organized in year 2023 with a total of 2,930 participants.
- 29,100 packs of Himalayan salt were purchased as gifts for shareholder meeting, totaling NTD\$2.5 million in support of social welfare organizations.
- The "TTY Rice" project "Support TTY, Support Health" organized 4 charity events.
- In year 2023, the Lioudu and Chungli factories reduced energy consumption by 339,488.86 Joules, and greenhouse emissions (CO<sub>2</sub>e) by 168.05 tons.
- The total waste of TTY was about 43.265 tons in year 2023.
- The Chungli and Lioudu factories achieved 100% in weekly and monthly waste clearance contractor follow-up audits.

# SUSTAINABILITY TOPICS OF CONCERN ANALYZED

TTY material topics are identified and reported based on Inclusiveness, Materiality, Responsiveness and Impact, the 4 principles of AA1000 Accountability Principle, 2018.

### **TTY Sustainability Topic Steps**

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STEP 1 Identification and Communication of Stakeholders	8 categories of stakeholder	<ul> <li>Stakeholder Engagement Standards to identify 8 categories: government, investors, customers, employees, suppliers, local communities, non-profit/non-governmental organizations, and the media.</li> <li>Getting to know stakeholders' topics of concern through multiple feedback channels.</li> </ul>
STEP 2 Collecting Sustainability Topics of Concern	17 topics of concern	<ul> <li>17 sustainability topics that are highly reflecting TTY operation are sorted based on industrial updates, domestic policies and international initiatives.</li> <li>Topics included: economic performance, ethical management, marketing ethics, talent attraction and retention, subject safety, occupational safety and health, social participation, drug safety, access to medicine, counterfeit drugs, reasonable pricing, supplier management, response to climate change, information security, sustainable development strategies, water resource management, and waste management.</li> </ul>
STEP 3 Material Topics of Concern Survey	32 topics of concern questionnaires received 76 stakeholders' concern questionnaires received	<ul> <li>The 17 topics of concern are included in the "Sustainability Topic - Materiality Assessment" survey, which is filled by level I &amp; II and higher managers under CEO. The results are quantified and assessed in accordance with levels of impact. In 2022, we received 32 answered questionnaires.</li> <li>The 17 topics of concern are included in the "Sustainability Topic - Levels of Concern" survey. In 2022, we received 76 questionnaires.</li> <li>Excluding significant changes in business scopes and in industrial value chains, the survey runs every other year. The latest survey was conducted in 2022, of which the results apply to 2022-2023.</li> </ul>
<b>STEP 4</b> Material Topics Identification, Examination and Establishment	11 sustainability topics	<ul> <li>To identify sustainability topics of concern of the year, TTY received 32 questionnaires completed by senior managers and 76 stakeholder surveys in 2022, which were then quantified and analyzed to finalize 11 material topics, including economic performance, talent attraction and retention, access to medicine, sustainable development strategies, counterfeit drugs, business ethics, drug safety, subject safety, reasonable pricing, supplier management, and marketing ethics.</li> <li>TTY's 11 material topics of 2023 are audited and assured by qualified third party for their adaptiveness of procedures and standards, and the integrity and inclusiveness of the topics, which are then approved by the Board of Directors through SDPC.</li> </ul>
STEP 5 Sustainability Report Review and Assurance	8 sustainability reports	Afnor Asia is commissioned to give external assurance of disclosures in the report in accordance with Type 1 of AA1000AS v3 and the moderate assurance. Financials are IFRSs-approved by KPMG Taiwan. This report is the 8th sustainability report published by TTY. Before publication, the report was extensively reviewed by the Sustainable Development Promotion Center and then submitted to the Sustainable Development Committee and the Board of Directors.

## Stakeholder Engagement

The 8 stakeholders, government, investors, customers, employees, suppliers, local communities, NPOs and NGOs, and media are outlined based on the nature of our operation and the industry, and the 5 principles of AA1000 Stakeholder Engagement Standard, SES, 2015 over Dependency, Responsibility, Tension, Influence and Diverse Perspectives.

To get a comprehensive idea of stakeholders' concerns and the level of impacts of the topics that deal with existing and potential impacts, we gather information in daily practices, which include partnerships, government-academic

### Topics of Concern to TTY Stakeholders, Communication Method, Frequency, and Specific Procedures

Stakeholders	Stakeholder Significance to TTY	Topics of Concern	Engagement Method	Communication Frequency	Communication Performance
Governmental Agencies	Governments direct our development. Each location abides by local regulations, and ensures transparent communication to seek government support and partnership.	Ethical management Marketing ethics Information security Water resources management Waste management Drug safety Subject safety	Visits/Phone/ Official letters/ Email/ Dissemination/ Industrial, government, and academic seminar/ Stakeholder Sustainability Topics of Concern Survey	Irregularly	<ul> <li>2 disseminations organized by TPEx</li> <li>24 industrial, government, and academic seminars</li> <li>More than 508 official letters</li> <li>2 times occupational safety audit</li> <li>Policies and orders announce</li> <li>2 times toxicity response practice</li> <li>Fire safety inspection and report</li> <li>GMP factories routine audit</li> <li>6 times regulation conferences</li> <li>Business waste operation audit</li> </ul>

exchange, routine investigations, and active communications with stakeholders. We can locate specific demands and expectations from them while underlining their topics of concern and readjusting operations accordingly. We provide responses that answer key concerns, ranging from critical company policies to updates on business and news, and the report on corporate governance, social welfare, and ecoprotection for stakeholders' review.

TTY Sustainability Development Promotion Center (SDPC) reported communication results with stakeholders in year 2023 (results submitted to SDC on 3/8/2024)

takeholders	Stakeholder Significance to TTY	Topics of Concern	Engagement Method	Communication Frequency	Communication Performance
	Investors are critical supporters of the Company. Our	Economic performance Counterfeit	Annual general meeting/Annual report	Annually	<ul> <li>29 material information announcements in Mandarin and English</li> <li>25 email replies</li> </ul>
	transparent and comprehensive company	drugs Drug safety	Quarterly financial report	Quarterly	<ul> <li>4 investor conferences</li> <li>6 conference calls</li> <li>120 domestic analyst visits</li> </ul>
	governance guidelines reassure	Marketing ethics	Operational overview announcements	Monthly	22 calls from shareholders
	investors, which consequently facilitate the Company's	Subject safety	Investor conferences	Quarterly or more frequently	
Investors	sustainable development.		Material information announcements/ Press releases/ Corporate website/Phone/ Email/Investor relationship mailbox/Stock affairs and investor relationship contact/Reception of domestic and foreign analysts/ Stakeholder Sustainability Topics of Concern Survey	Irregularly	
	Customers constitute key partners in the Company's development. TTY keeps	Subject safety Marketing ethics Drug safety	Exhibitions/ Academic activities/ Educational seminars/ Academic	Irregularly	<ul> <li>TTY provide more high-quality products and services that meet market needs,</li> <li>TTY interacts with domestic and foreign customers, including via:</li> <li>Domestic/foreign medical exhibitions: 23 sessions</li> </ul>
Customers	aligned with business trends, provides superior products and service, and maintains constant communication	Talent attraction and retention Information security	platforms/Clinical trials/Factory visits, inspections/Visits/ Phone/Email/ Letter/Stakeholder Sustainability Topics of Concern Survey		<ul> <li>Education activities/seminars: 171 sessions</li> <li>Academic platforms: addition of 3 academic platforms, and the Central Taiwan Hematology Academy and Northern Taiwan Hematology Academy continue.</li> <li>Clinical trial research: oncology, intensive care, healthcare totaling 14</li> </ul>
	with customers to create a win- win.				<ul> <li>Projects.</li> <li>11 visits to production factories</li> </ul>

ent	Communication Frequency	Communication Performance
ł	Twice annually	<ul> <li>Regular KPI review with all permanent employees (employees on probation excluded).</li> <li>Organized 4 labor-management meeting</li> </ul>
	Quarterly	<ul> <li>Mo employee complaints were received in the year 2023.</li> <li>The new employee satisfaction in 2023 was 90 (a total of 100 points). The</li> </ul>
al Innel/ Ibox/ an on yee ittee/ ittee/ ittes/ ation dies/ cern	Irregularly	<ul> <li>was 90 (a total of 100 points). The retention rate of new employees was 99.32%.</li> <li>7 people applied for parental leave without pay in 2023.</li> <li>19 online and in-person lectures were held in 2023.</li> <li>There were 117 external educational trainings subsidized by the Company.</li> <li>TTY provides all employees and their first-degree family members with cellular and adjuvant influenza vaccinations for free, benefiting a total of 803 people in 2023.</li> <li>COVID-19 self-test kits are provided by the Company for employees.</li> <li>Organized 2 environmental sustainability promotions.</li> <li>Employee Welfare Committee.</li> <li>Provided scholarship/financial aid in 2022. (Once each in the 1st and 2nd semesters)</li> <li>Distributed holiday vouchers and e-gift coupons (Labor Day, Lunar New Year, Dragon Boat Festival, Mid-autumn Festival).</li> <li>Employees health check</li> <li>End-year event</li> </ul>
vision of y pplier	Annually	<ul> <li>New Suppliers are required to update the survey based on the assessment of qualification of quality system management, 5 suppliers of the key raw materials have passed the evaluation.</li> <li>Ensure the effectiveness of suppliers' GMP certificates and compliance</li> </ul>
calls/ older cern	Irregularly	<ul> <li>of raw materials. No GMP violations announced by international drug regulatory organizations.</li> <li>Annual supplier performance is assessed to identify risk levels and to monitor frequency. No supplier was graded C in year 2023.</li> </ul>

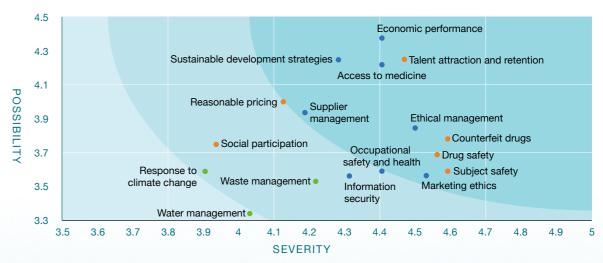
Stakeholders	Stakeholder Significance to TTY	Topics of Concern	Engagement Method	Communication Frequency	Communication Performance
Local Communities	Local communities are our partners. Through communication and interaction we can achieve harmony in our relationship. By benefiting the community, we emphasize positive energy in society.	Counterfeit drugs Water resources management Waste management Drug safety Talent attraction and retention Occupational safety and health Social participation	Email/Visits/ Phone/Meetings/ Educational seminars/ Stakeholder Sustainability Topics of Concern Survey	Annually or Irregularly	<ul> <li>Business waste procedure</li> <li>Fire safety inspection</li> <li>Cooperated with the Department of Public Health, Taoyuan, TTY delivered 500 adjuvant flu shots to protect the environment, health and pandemic volunteers.</li> <li>Contracted toxic-free rice from Daxi small-scale farmer as souvenirs for blood donors through Taipower Keelung District and for households in need through the Department of Social Welfare, Taoyuan.</li> </ul>
NPOs/NGOs	NPOs are partners in developing sustainable impact. Knowing their needs, making lasting connections, and driving ecological and societal themes propels benefits back to society.	Sustainable development strategies Information security Waste management Talent attraction and retention Occupational safety and health Social participation	Activity participation/ Email/ Visits/ Phone/ Meetings/ Stakeholder Sustainability Topics of Concern Survey	Irregularly	<ul> <li>Sponsored the Hope Foundation for Cancer Care, and provided NTD\$1 million to support children with cancer family through college.</li> <li>Supported Yu-Cheng Social Welfare Foundation by purchasing 29,100 packs of Himalayan salt with NTD\$2.5 million as gifts for shareholder meeting.</li> <li>Cooperated with cancer-related NPOs to organize health education lectures for cancer patients and families with totaling 160 participants.</li> <li>Participated 15 charity events in Keelung, Taipei, New Taipei City, Yilan, Taoyuan, Miaoli, Taichung, and Kaohsiung as part of our CSR commitment.</li> <li>Forward industrial and commercial policies.</li> <li>Attended labor advance studies at the Keelung Labor Association.</li> </ul>
Media	A positive link with the media bridges corporations and the public, facilitates proper Company information and brand image, and allows stakeholders to openly access complete Company information.	Economic performance Reasonable pricing Ethical management Access to medicine Drug safety Talent attraction and retention Social participation	Media visits/ Phone/ Press conference/ Media press conference/ Brand event/ Interview/ Visits/ Stakeholder Sustainability Topics of Concern Survey	Irregularly	<ul> <li>To guide media stakeholders to understand the dynamic development of the Company's overall operations and product layout, communication is as follows:</li> <li>2 press conferences on product facts</li> <li>1 vaccine donation press</li> <li>1 anesthesia health forum</li> <li>1 media interview</li> <li>4 visits and partnerships with hospitals and institutions for vaccine donation</li> <li>2 discussions and visits with patients on cholangiocarcinoma</li> <li>4 activities of the TTY Rice project</li> <li>Instructions for irregular visits and telephone contacts</li> </ul>

## Material Topics Identification

To properly reflect on the impacts on the economy, environment, and society of TTY operations, and the topics that may affect stakeholders' decisions, we identified 17 topics of concern that are highly related to our operation, taking into consideration industrial updates, central policies and international initiatives (GRI Standards, SASB Standards). These are then prioritized on the GRI 2021 to further disclose the impact, management strategy, and practice of each one. The sustainable development goals and strategies are realigned with the above results, strengthening the

Assessment of Operational Impact	It has been a number of years since we have iss and industry dynamic, we gathered key sustain among stakeholders and the "Sustainability Top tackled the severity (scale and scope), likelihood them in a more detailed, standardized manner.
Verification of Material Topics	The results of the TTY "Sustainability Topics of before prioritization by quantized values. The th were identified in year 2022-2023.
Examination of Material Topics	Consultations were held to ensure the suitability examination. The work also covered the comple Company's sustainable development strategy of
Establishment of Material Topics	The 2023 identification concluded 11 material to went on to make disclosures in the report regar management action, indices, and goals.

### TTY's 2022-2023 Sustainability Topics Materiality Assessment Matrix Chart



effectiveness of external communication.

To reflect on the topics of concern by stakeholders and the impacts made to the environment, communities, and economy, we perform the "Sustainability Topics of Concern Survey" every 2 years to explore the 17 topics of concern. We invited senior managers to complete the questionnaires and referred to the external stakeholders' levels of concern, which were then quantified and analyzed to finalize 11 material topics in year 2023. The 11 material topics have been verified by an independent consultant and approved by the Board of Directors for finalization.

ssued a Sustainability Report. Through observation of global trends nability topics. With the 17 sustainability topics that are surveyed opics of Concern Survey", 34 first, second, and higher level managers od of occurrence, and human right risks of each topic, and assessed c. (received 32 surveys with 94.12% survey response rate)

f Concern Survey" in year 2023 were equally weighted and analyzed hreshold of material topics are formed at this stage. 11 material topics

ity of identified material topics and threshold criteria through bleteness, inclusiveness, macro perfection, and the consistency of the of report priorities.

topics, which are established by the Board of Directors. The SDPC arding the impact of each topic, along with TTY's policy, commitment,

### TTY 's Material Topics and Scope in Year 2023

			Va	lue Chain In	npact	
			Upstream	Midstream	Downstream	
Material Topic	Material Topic Aspect	Significance and Importance to TTY	API Supplier	TTY	Generic drug factories Medical hospitals Original factories	Chapter
Economic performance	Economic / Governance	TTY is navigating inclusive, sustainable economic growth, and is accelerating the development of generic drugs of specialty dosage forms and new drugs of high barrier and economic value, as well as unmet medical needs, improving the quality of human life with scientific innovation.		Ø		About TTY Biopharm
Talent attraction and retention	Social	Our talent is our foremost asset. TTY is a friendly workplace, promotes learning, and is an inclusive, innovative incubator where people envision self-positioning and self-value. A comprehensive education system and tailored training plans for employees of high potential and successors, through attract and retain talent so we are well prepared for a changing market and improving our technologies and innovations.		$\bigotimes$		Workplace Happiness Talent Cultivation
Access to medicine	Economic / Governance	Health promotions or lectures and partnerships with NPOs/ social organizations dedicated to disease awareness of illness prevention. We also worked with external organizations to prepare the communities against viruses and diseases.	,			Social Participation
Sustainable development strategies	Economic / Governance	The Sustainable Development Committee (SDC), ethical management implementation of CSR as a core value, and better planned specific responsibility are all in place to drive our sustainable goals. The Committee revises and reviews related policies, execution, performance, and systems.		Ø		Sustainable development strategies & performances
Counterfeit drugs	Human rights	All raw materials are sourced from qualified suppliers, and customers of the drug supply chain can be tracked via shipping records. GPS is installed in transportation of drugs to ensure quality of delivery to the designated destination and user safety. The qualified GDP logistic service shows our commitment to intact packing and content quality, eliminating counterfeits in the supply chain.	$\bigotimes$	Ø		Supply Chain Traceability
Ethical management	Economic / Governance	The pharmaceutical business works closely with the national economy and people's health, and drives environmental sustainability. In light of this, the Ethical Management Promotion Center takes responsibility for ethical operations and the holistic development of our corporation, as well as the setup of risk assessment procedures to fortify internal control. The 3rd version of "Procedures for Ethical Management and Guidelines for Conduct" of March 2020 continues to prevent dishonesty, bribery, and illegality by directors, managers, and employees.	$\bigotimes$	$\bigotimes$		Ethical Management

			Va	lue Chain Ir	npact	
			Upstream	Midstream	Downstream	
Material Topic	Material Topic Aspect	Significance and Importance to TTY	API Supplier	TTY	Generic drug factories Medical hospitals Original factories	Chapter
Drug safety	Human rights	The pharmaceutical business is directly related to the life and health of users. The API dictates the effectiveness and safety of preparations. As such, TTY uses discretion in reviewing and managing API suppliers of US/EU generic drug makers, which are required to have Taiwan DMF registration, cGMP and PIC/S GMP. TTY's key products fully comply with applicable health and safety regulations.	$\bigotimes$	$\bigotimes$	$\bigotimes$	Drug Safety
Subject safety	Human rights	Development of drugs in TTY follows the Human Subjects Research Act and the Guidance for Good Clinical Practice. Human research and clinical trials for cancer drugs have been approved by the Ethics Committee and regional health authority. Individual cases are insured to protect test subjects' rights. We also have a standard procedure for clinical trial operations, which is executed by fully trained clinical specialists to ensure drug use safety.		$\oslash$	$\oslash$	Subject Safety
Reasonable pricing	Social	TTY operations strictly comply with government regulations and controls to provide safe, effective products at the best quality and reasonable price. Our dedicated team is devoted to quality generic drugs, and applies NHI prices that are fairer to the original makers to balance NHI financial impact.			$\oslash$	Responsib of Sales
Supplier management	Economic / Governance	TTY evaluates vendors' financial status, organization management, realization of CSR based on Quality Assurance, Stable Production Capacity, Cycle Time Reduction, and Sustainability as a Goal. The system is referred to the Supplier Management mechanism. Annual assessments and risk ratings are given to existing suppliers to facilitate graded management. Questionnaires are distributed to suppliers to evaluate their sustainability. The insight of suppliers' overall condition serves as a reference for each factory when determining supplier qualification.	$\odot$			Supplier Screening and Manageme
Marketing ethics	Economic / Governance	TTY regards patient medical wellbeing and care as its foremost concern. We adopt business guidelines and codes of conduct following ethical management and health care ethics to ensure good business operations and a sustainable future.			$\oslash$	Responsib of Sales





# **ABOUT TTY BIOPHARM**

• About TTY Biopharm

- TTY Strategy Deployment
- TTY Operational Development Strategies



- ★ Consolidated revenue was NTD **5,506** million in the 2023 (6.98%
- ★ The first complex generic Liposome drug, Lipo-AB has been
- ★ Complete product lines for intensive cases, vaccines, and oncology.
- ★ Sole distribution and license approval in Taiwan for new type anti-
- ★ Sole distributor of anesthetic formulas. Complete full-line choices for health checks, beauty surgeries, and medical operations.
- ★ Agreement on a memorandum with **3** advanced Vietnamese hospitals to facilitate the ASEAN Medical Collaboration Project.
- $\star$  By the end of 2023, a total of **5** invention patents were approved.
- ★ Provider of the NHI-covered flu vaccine. A total of **860,000** NHIcovered vaccines, and **250,000** self-pay cellular and adjuvant vaccines were provided in 2023.

## **ABOUT TTY BIOPHARM**



## **Operation Result**

TTY Biopharm Co., Ltd. was founded on July 22, 1960, and its headquarters is located on the 3rd floor, No. 3-1, Park Street, Nangang District, Taipei City. The number of regular employees is 508, and the primary categories of businesses include manufacturing, processing, and trading of various pharmaceuticals and chemicals. Primary products include oncology (cancer) drugs, anti-infective drugs, vaccines, anesthetic drugs, and healthcare drugs for chronic diseases. It was listed on the OTC in September 2001 (4105:TT), and the paid-in-capital was NTD 2.486 billion, with consolidated revenue reaching NTD 5,506 million in the year 2023.

#### Consolidated Financial Statements for TTY and its Subsidiaries for the Recent 5 Years (Currency: NTD)

Item	Unit	2019	2020	2021	2022	2023
Paid-in Capital	Thousand NTD	2,486,500	2,486,500	2,486,500	2,486,500	2,486,500
Operating Revenue	Thousand NTD	4,466,308	4,221,836	4,535,610	5,061,606	5,505,542
Gross Profit	Thousand NTD	2,907,241	2,607,052	2,766,553	3,021,115	3,282,130
Operating Income	Thousand NTD	1,228,609	957,379	1,140,652	1,227,957	1,372,433
Income Tax	Thousand NTD	294,949	222,848	264,811	305,249	300,864
Net Income	Thousand NTD	907,705	978,677	822,569	1,103,090	1,118,601
Profit Attributable to Owners of The Parent	Thousand NTD	900,081	924,178	831,894	1,094,391	1,128,509
EPS	NTD/Share	3.62	3.72	3.35	4.40	4.54
R&D Expense	Thousand NTD	298,552	261,597	287,595	353,436	310,438
Cash Dividends	NTD/Share	4.0	4.0	3.0	3.4	3.5

P005 of the TTY subsidiary.

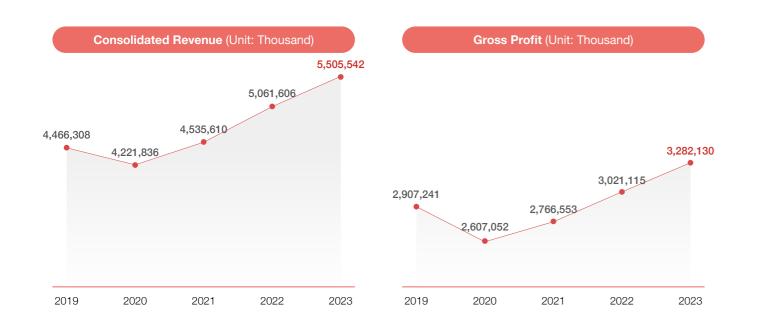
Note: 1. The entities in the consolidated financial statements include TTY and all its subsidiaries. For detailed information on subsidiaries, please refer to 2. 2023 cash dividends will be distributed by the resolution of the Board of Directors meeting on 8/3/2024.

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In recent years, TTY has adopted 2 key strategies that focus on the development of complex generic drugs and medication distribution as the force to drive revenue for the next 5 years. The "Liposome" and "Microsphere" Technology Platforms are the competitive niche of TTY. These platforms not only enjoy a leading position in R&D capabilities in Taiwan, but the commercial mass-produced products are also superior to their peers both in terms of consistency and stability, adding momentum to operational growth. Amphotericin B (Lipo-AB) is one of our self-developed complex generic Liposomes, which gained a US drug license in 2022 and subsequently began to supply in 2023. We expect the formula to grow extensively in the market and drive up international profit; at the same time, the distributing drugs and flu vaccines are also contributing to the local market and production capacity.

## To enhance R&D technology, to improve the quality of human life.

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#### Direct Economic Value Generated and Distributed by the Organization

Item	(Unit: Thousand NTD)	2019	2020	2021	2022	2023
Direct Economic	Operating Revenue	4,466,308	4,221,836	4,535,610	5,061,606	5,505,542
Value Generated (A)	Non-operating Revenue	52,549	38,335	23,940	54,873	97,444
	Operational Costs	1,684,602	1,705,875	1,813,704	2,087,126	2,268,772
	Employee Salary and Benefits	988,792	1,035,162	1,032,301	1,075,497	1,087,730
Economic Value Distributed	Payments to Providers of Capital	1,118,925	994,599	994,600	745,949	945,410
(B)	Payments to Government	298,312	226,453	268,315	308,853	304,739
	Community Investment	52,787	46,230	47,099	86,735	116,568
Economic Value Retained (A-B)		1,494,364	1,246,451	1,398,131	1,558,268	1,825,177

## **Operation Analysis**

TTY operates at five locations, (1) Headquarters, (2) Chungli Factory, (3) Lioudu Factory, (4) Pharmaceutical Development Center, and (5) Neihu Factory. Through long collaborations with international pharmaceutical companies, we have built strong development and manufacturing abilities to provide an all-compassing solution for drug delivery systems. All 3 production sites have observed cGMP and each factory focus on oncology (Chungli) and non-oncology lines (Lioudu), and clinical drugs (Neihu) respectively. We have passed central compliances (US FDA, EU EMA, Japan PMDA, and Taiwan FDA) and partner operators' audits.

TTY 3 main product teams, Oncology Business Unit (TOT), Intensive Care Business Unit (TIT), and Healthcare Business Unit (THT) provide consistent revenue for the Company; the Contract Development and Manufacturing service provides "manufacturing-related" solutions, such as dosage R&D, amplified mass production, and even tailored design for equipment and production site and commercial mass produce at a later stage, throughout the entire pharmaceutical value chain to help our partners relax on the budget and use investment to explore products that best address market needs. This is how we maintain trust and collaborations with international pharmaceutical companies. In 2023, the CDMO contributed to 7% of the revenue, with customers located in Taiwan, Japan, the EU, and the US.

TTY has exceptional talent and core technologies and has had great advantages in cost control. It has also actively expanded its CDMO business and sought out manufacturers with contract manufacturing needs both in domestic and foreign markets. It can not only improve the domestic biotechnology industry but also support R&D and market expansion. Furthermore, such a market can also create stable cash flow and share operating results with investors.

#### **Revenue Proportion of TTY for the Recent 3 Years**

Business Unit / Year	2021	2022	2023
Oncology Business Unit (TOT)	52%	51%	48%
Intensive Care Business Unit (TIT)	28%	27%	21%
Healthcare Business Unit (THT)	5%	5%	12%
Contract Development and Manufacturing Organization (CDMO)	10%	9%	7%
Business Development Division (BDD)	4%	6%	11%
Others	1%	2%	1%

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## TTY passed the Taiwan PIC/S GMP inspection certificate



## TTY passed the US FDA inspection certificate

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## Market Overview

TTY excels in the development of specialty dosage forms and new drugs. As a drug developer for biotechnology, TTY has made Taiwan its primary market for providing services, while the area for export is mainly Southeast Asia, including Thailand, the Philippines, and Vietnam. No products or services are prohibited from any specific markets. Sales channels are mostly direct to medical centers and regional hospitals, while regional hospitals, clinics, and pharmacies are marketed by distributors. The majority of beneficiaries are cancer patients, hospitalized patients with infectious diseases, or patients with gastroesophageal reflux, osteoporosis, high uric acid, and bacterial infections, and satisfy the needs of vaccine market.

#### TTY Sales Volume in the Recent 5 Years (Unit: Thousand Tablets/Thousand Pieces)

Main	2019		2020		2021		2022		2023	
Product	Domestic Sales	Export								
Ointment	2,479	-	2,491	-	2,266	-	2,326	-	2,234	-
Oral Drug	393,049	15,551	346,908	15,725	331,583	15,497	369,867	18,190	427,478	18,542
Injection	4,592	486	5,151	205	5,309	235	6,028	409	5,883	395
Other	789	-	505	-	703	-	662	-	537	15

Note: The domestic sales for oral doses in 2022 presented as 369,553 thousand tablets was false and is corrected here to 369,867 tablets in 2023 report.

#### TTY Sales in the Recent 5 Years (Currency: NTD, Unit: Thousand NTD)

Main	2019		2020		202	2021 2022 2023		23		
Product	Domestic Sales	Export	Domestic Sales	Export	Domestic Sales	Export	Domestic Sales	Export	Domestic Sales	Export
Ointment	89,429	-	88,869	-	94,491	-	94,836	-	90,489	-
Oral Drug	2,006,218	130,556	2,035,732	150,747	2,144,779	129,256	2,302,709	181,555	2,482,122	179,667
Injection	1,478,173	555,205	1,683,176	125,056	1,817,541	124,983	2,076,099	180,138	2,114,673	316,826
Other	112,712	-	109,662	-	113,138	-	94,185	27	111,631	58
Total	3,686,532	685,761	3,917,439	275,803	4,169,949	254,239	4,567,829	361,720	4,798,915	496,551

## External Engagement

Facing the rapid economic, social, and environmental changes around the world, TTY has, as an excellent biotech pharmaceutical company, focused on the development of specialty dosage forms and new drugs, actively participated in external initiatives and public associations, and maintained a good relationship with the industry, government, and academic circles. In the year 2023, TTY participated in 7 major external initiatives and 13 public associations, held significant positions, and participated in conferences to communicate industry viewpoints and progress ideas through information exchange and sharing. This high degree of participation has helped provide assistance to the sustainable development of the biotechnology and pharmaceutical industry and facilitate collaboration with peers to establish a far-reaching social influence.

## **External Initiative**

- Sustainable Development Goals, SDGs
- Sustainability Reporting Guidelines (Global Reporting Initiative, GRI)
- Sustainability Accounting Standards Board, SASB of Biotechnology and Pharmaceutical Industry Disclosures
- The United Nations Global Compact, UNGC
- Task Force on Climate-related Financial Disclosures
- World Economic Forum, "WEF's Partnering Against Corruption Principles for Countering Bribery"
- maximization; encouraging public governance of the Tamsui River System; and TTY Ecology Action.



• The Commonwealth Water Conservation Action Initiative "Do One Thing for Tamsui River" centers on 5 commitments: standard discharges of sewage and waste only supervision to ensure no illegal dumping by waste contractors; green purchase

#### Participation in External Associations and Memberships

Name of the Organization	Strategic Significance	Position Held
Institute for Biotechnology and Medicine Industry (IBMI)	Work together on pharmaceutical and bio-technology development, improve technology, promote R&D, to maintain national health and national economic growth.	Member
Taiwan Bio Industry Organization	Work together on pharmaceutical and bio-technology development, improve technology, promote R&D, to maintain national health and national economic growth.	Member
Taiwan Pharmaceutical Manufacture and Development Association	Work together on pharmaceutical and bio-technology development, improve technology, and promote R&D, to maintain national health and national economic growth.	Director, Deputy Chairperson of Intellectual Property and Legal Committee
Taiwan Pharmaceutical Manufacturers Association	Improve connections within the industry to seek shared profit. Find methods to improve and promote the pharmaceutical industry for economic development.	Member
Taipei Pharmaceutical Agents and Distributors Association	Bridge agents of Western drugs across Taiwan to facilitate conversation with government, medical and healthcare policies, and the drafting and promotion of medical and pharmaceutical regulations.	Director
Taipei Pharmaceutical Business Association	Bridge agents of Western drugs across Taiwan to facilitate conversation with government, medical and healthcare policies, and the drafting and promotion of medical and pharmaceutical regulations.	Member
Taiwan Society of Regulatory Affairs for Medical Products	Study medical and pharmaceutical policies and regulations; establish a platform to facilitate coordination of health and medical/pharmaceutical product management regulation; share regulations and knowledge to improve accessibility, international connection, and innovation value.	Member
Taiwan Parenteral Drug Association	Improve connections within the industry to seek shared profit. Find methods to improve and promote the pharmaceutical industry for economic development.	Executive Director
Keelung Federation of Labor	Required by law	Member
Medical and Pharmaceutical Industry Technology and Development Center	Improve connection within the industry to seek shared profit. Find methods to improve and promote pharmaceutical industry for economic development.	Member
Taiwan Generic Pharmaceutical Association	Seek common consent among industry, government, and academic research, to produce market value for generic drugs.	Director
Taipei Medical Instruments Commercial Association	Improve connection within the industry to seek shared profit. Find methods to improve and promote the pharmaceutical industry for economic development.	Member
Monte Jade Science & Technology Association of Taiwan	The Association seeks Chinese startup participation to gain access to topics such as technology, entrepreneurship, and investment to empower the knowledge economy and boost small/medium businesses. They are open to the opportunities of increasing funds from investors through innovative technology, business pattern, or the transformation of marketing/ packaging.	Executive Director

# TTY STRATEGY DEPLOYMENT

To further business development, in recent years, we have secured the introduction of international new drugs, including targeted medication for Cholangiocarcinoma, sedatives, anesthetic drugs, and novel-tech produced cellular flu vaccines, adjuvant flu vaccines for people aged 65 years old and over. From there, we take the initiative and give authorizations to Liposomes and microspheres. Our strategy is to stabilize business development and navigate into international markets by seeking the authorization and introduction of new drugs to Taiwan, and our capacity to self-developed complex generic drugs.

## New Drug Launch to Complete Intensive Care, Vaccine and Oncology Product Line

TTY has been working with multinational corporations on the development of new types of drugs. In 2022, we became the sole distributor of a new type of antibiotic, which obtained a local license and became available in Q3 of 2023. Its broad spectrum covers not only Gram-negative and Gram-positive bacteria but also infections from multidrug-resistant organisms. In the EU/US, the drug has been authorized and used on clAl. As a long-time developer in severe medical territory, TTY works on new formulations and complex generic drugs, and distributing multiple antibiotics in Taiwan. Statistics have shown that the sales of TTY's antibiotic injections for severe diseases have reached the top 3 in Taiwan; Also, the antibiotic therapy relies much on the judgment of local clinical data, therefore, TTY works closely with all levels of hospitals on numerous clinical trials to maintain trustworthy relations.

After cellular flu vaccines, TTY again imported adjuvant influenza vaccinations to safeguard our people with a more complete set of vaccination options. Since year 2020, TTY began to provide cellular flu vaccination, mostly covered by NHI and partially self-pay shots; On March 7, 2023, we received a

The introduction and development of antibiotics and oncology drugs continue. The development for complex generic drugs continues.

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drug license for the adjuvant vaccinations we imported from Australia that better accommodate the immune system status of elder above 65 years of age. The new product went into the self-pay market in Q3 of the same year to address the high demand in autumn and winter. At the same time, TTY seeks active collaboration with the Australian company on the CDMO of the overseas vaccines production.

To address clinical demands in health checks, beauty surgeries, and medical treatment, in 2022, TTY introduced a new anesthetic drug to local practitioners and clinical needs. Through sole distribution in Taiwan from German producer PAION, the drug has passed the Taiwan FDA, and prescribes the indication of adult sedation treatment in 2023. It is expected to answer the 1.3M self-pay health checks and over 2.5M general anesthesia needs every year. This is a commitment to serve new-generation anesthetic options and build an all-around anesthetic line through the importation of sedatives, anesthetics, and painkillers for all stages of operation, ensuring safe, comfortable, and diverse medical solutions.

For oncology lines, our main focus in recent years on Cholangiocarcinoma targeted therapy is a decision based on the limitation of choice for late-stage diagnosed patients and their families. Considering that the disease is hard to spot at early development, we introduced Pemigatinib, the first US FDA-approved late-stage medication for Cholangiocarcinoma, to Taiwan as our determination to bring international choice to local hospitals. This is TTY's first targeted therapy product, which was listed under NHI temporary coverage in May 2023 to provide better accessibility and ease financial stress for patients. TTY will continue to present standard therapy options while screening new targeted medications to enrich oncology therapy lines, driving revenues, and echoing our vision of improving the quality of life with scientific innovation.

## Extensive Product Portfolio and Combinations for Local and **Overseas Markets**

Among the numerous unmet medical needs in Taiwan, the 2 territories of oncology, intensive care and anti-infection are the most critical. Our collaboration for a comprehensive R&D strategy, manufacturing, and complete product lines will keep us thinking of speed and quality. Other than research and marketing for the 2 fields, a series of novel types of drugs will also be introduced to Taiwan, giving medical personnel more remedy solutions. TTY aims at Taiwan-based international pharmaceutical company that specialize in cancer treatment and severe case anti-infection.

Overseas markets contributed to 11% of the revenue and will invest further in Thailand, Vietnam, Korea, the Philippines, Singapore, and Malaysia to build channels, portfolios, and locations, generating sales through networking, and optimizing production capacity with greater market needs. The overall cost-efficacy and rise of production also allowed us to strengthen widely in overseas markets and gain collaboration opportunities, eventually reaching a two-digit market share.

To connect with local clinical demands, TTY initiated an "ASEAN Medical Collaboration Project" in 2023, and agreed on a memorandum with 3 Vietnamese medical institutions in May to dive deeper into their clinical needs, while exchanging treatment, good clinical practices, and relations between the 2 countries through the sharing of Taiwanese medical centers' and our resources, limited hospital trainings, research meetings, visits to hospitals, as well projects with academic and medical associations. The effort ensured our mission of "providing solutions to global medical issues."

## CDMO (Contract Development Manufacturing Organization) to Expand the EU/US market

By lifting production capacity and quality, we plan to introduce the self-developed complex generic Liposomes, Lipo-AB to the US, EU, and Southeast Asia. At the end of 2022, Lioudu, the production site of the generic drug, acquired US FDA's certification and began to supply the US market stably. In Q2 2023, we started partnerships with international pharmaceutical company to joint-developed and promote the market share of Liposome products. In recent years, we also have worked with EU, US, and Japanese pharmaceutical companies on exploring solutions to global medical issues and establishing global markets through industrial collaboration.



## **TTY OPERATIONAL DEVELOPMENT STRATEGIES**

- Ensure that key products are launched on schedule to reach short-term profit goals. Consistent quality manufacturing of products with a long lifecycle.
- · Enlarge the foundation of the highbarrier technology platform for specialty product combinations, and improve the commercialized economic scale.
- · Carefully select development targets for innovative drugs and partner with international marketing companies; release market authorization when appropriate while retaining market rights in certain target countries to increase the number of direct sales of drug products with a long lifecycle.

R&D

Strategy

- Through income from local and overseas markets to support product development and additional territory expansion.
- Through income from the CMO business and co-development of international specialty drugs to cover factory operation expenses.
- Introduce development results to global markets with overseas authorizations; combine product and R&D income to support new products and businesses, and therefore create a positive business cycle.
- Focus on global biotech investment targets; monitor medical care changes in target countries; create ultimate group profit, seize mid-to-long-term development opportunities.
- Speedy recruitment and cultivation of local talent resources with start-up ability; enhance staff product development capacity to meet scientific, regulatory, and enterprise operation requirements; intensify department internationalization for future growth potential.

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 Continue implementing training courses to keep up to date with pharmaceutical regulations, and international and domestic inspections on factories to sustain stability and superior quality in production.

• Carefully plan the manufacturing production lines, production, and sales coordination in the production management process to ensure the balance of production capacity and marketing.

· Independent manufacturing and management of raw materials, functional excipients, and special packaging materials. Establish supplier quality regulations to implement cost control and maintain stable supply sources.

Marketing

Strategy

Production Strategy

### Short-term Development Plans

Operation Strategy

- Continue research and introduce suitable drugs to meet unmet medical and clinical needs; become the best clinical therapy partner with advanced solutions for clinical doctors.
- Enhance the integration of commercial products and the value chain and be the best CRO/ CMO/ CDMO partner to global specialty drug companies.

- Optimize the development of carefully selected innovative drugs, and partner with international marketing companies at the correct time for co-development whilst inputting R&D expenses and company revenue through the tiered achievement of new contracts, milestone payments, and royalties.
- · Continue with the development of brandname drugs in specialty dosage forms and new drugs of high economic value; enhance international partnerships; launch registrations for products.
- Upgrade equipment specifications, expand production capacity, and keep consistent and top-quality products in compliance with global and local quality regulations.
- Install a new production line for new drugs with specialty dosage forms for the commercialization and globalization of drugs of specialty dosage forms for production integration.
- Fortify the association between supply chain and procurement to best control the quality and pricing of supplier materials; green procurement and supplier sustainability management mechanism promotion.

R&D Strategy Marketing Strategy

Production

Strategy

Mid-term

**Development** 

Plans

Operation

Strategy

- GIRA (Government, Industry, Research, Academy) partnership initiatives to gather voices and support from every direction. International experience sharing to expedite business development sustainability.
- Swift recruitment and cultivation of local talent with start-up abilities; enhance product development capacity to meet scientific, regulatory, and enterprise operations in an equal and balanced manner, as well as cross-field operations and marketing skills.
- Introduce flu and other vaccines from abroad to contribute to a well-established public health and safety system in Taiwan; an intensive care team is to be assembled to complete clinical treatment options for critical patients and fulfill the void and need for medical solutions in the current system based on the foundation of the governmental healthcare policy.
- Accelerate the setup of sales and distribution overseas with relevant drug licenses; continue to focus on each target market for brand activities that promote differentiation for local optimization, together with the operation and management of the business life cycle; grow product sales overseas to increase revenue from global market coverage.

- · Seek the evaluation and investment balance of targeted drug development for the initial, middle, and final phases; optimize product combinations and competence of the targeted disease treatment domain (specialty drug, biological drug, new drug). Sustain the company's short- and long-term growth momentum as well as value chain integration.
- · Foster international partnerships and/ or self-accelerated development to meet unmet medical needs, high-barrier drugs, the need for brand-name drugs and new drugs with specialty dosages of profitable value, or clinically and medically associated products with a market niche.

R&D

Strategy

- Commit to the development of new drugs, drugs with specialty dosages, biological drugs, and medical treatment technology to create a more complete product portfolio.
- Continue to strengthen and develop high-barrier dosage drug platforms to extend their application benefit.
- Continue to expand the development and manufacturing territories for cancer, intensive care, anti-infection, and specialty dosage drugs; continue to increase international market share.
- Become one of the world's most innovative biotech pharmaceutical companies and the most sought-after partner to work with for international biotech companies.

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· Continuously maintain drug manufacturing sites that follow, renew, and comply with international drug regulations.

• Install a new production line for new drugs to accomplish the commercialization and globalization of drugs of specialty dosage forms and new drugs for production integration.

• Maximize manufacturing energy and supply chain management through critical strategic actions including M&A, strategic alliances, and joint ventures; complete consolidation of production quality and efficiency.





## CHAPTER

# **SUPPLY CHAIN** MANAGEMENT

- under examination.
- products.

• Pharmaceutical Industry Value Chain • The Power of Intellectual Property

- Supplier Screening and Management
- Drug Safety
- Responsibility of Sales

## Key Performance

★ Currently holding **139** valid drug licenses.

★ More than **35** pharmaceutical items were listed in the NHI Pharmaceutical Benefits and Reimbursement.

 $\star$  By the end of 2023, **5** valid invention patents were awarded.

★ By the end of 2023, **206** valid trademarks were granted and **8** were

★ The trial drug is in full conformity with International PIC/S GMP Pharmaceutical standards and Good Distribution Practices for

# PHARMACEUTICAL INDUSTRY VALUE CHAIN

In the pharmaceutical manufacturing supply chain, there are 3 stages: upstream, midstream, and downstream. Upstream and midstream refer to the preparation of raw materials (APIs), while downstream involves the manufacturing of drugs and sales channels. Drugs are categorized into original, bioequivalence generic (BE) drugs (imported or domestic), and non-BE generics. In Taiwan's pharmaceutical industry, most suppliers focus on downstream operations and manufacture and sell non-BE generics. However, TTY is a leading biotechnology pharmaceutical company that offers one-stop services from research to production and sales. They specialize in developing specialty dosage forms and new drugs. No significant changes in the supply chain occurred during the reporting period.



#### Value Chain of TTY

Supply Chains	Upstream	Midstream	Downstream
Relationship	API Factories API Agencies	TTY Biopharm	Sales Channels Distributors
Activities	<ul> <li>Manufacture and sales of Active Pharmaceutical Ingredients (APIs) required for generic drugs</li> <li>Provide APIs required for new drug development</li> </ul>	Manufacturing medicines with expired patent rights, and converting them into injections or tablets	Distribution and logistics services; the sale and promotion of medical drugs
	Traders of raw materials     API factories: Merck, Biofer, DuPont,     DSM, Formosa Laboratories, ScinoPharm,     SCI Pharmtech, Oriental Silicas, Ming Tai	Generic drug factories: TEVA, Pfizer, Roche, TTY Biopharm, Yungshin Pharm	Direct sales channel: medical centers and regional hospitals
Entities	Chemical Traders of raw materials: Lynnbros, Suanhong Trading, G. Excipients		Distribution: local hospitals, clinics, and pharmacies

# THE POWER OF INTELLECTUAL PROPERTY

## Investment in R&D

TTY is a well-established company in Taiwan that specializes in high-quality manufacturing. It conducts active research and development to produce pharmaceuticals that address the unmet needs of the medical market. TTY has also expanded into overseas markets by producing complex generic drugs. The company's technology platforms utilize liposomes and microspheres, which offer long-acting, sustained-release, and targeted benefits. These benefits do not affect liver and kidney function in excessive dosages, resulting in fewer side-effects for patients.

#### TTY R&D Expenses in the Recent 5 years

Item	Unit	2019	2020	2021	2022	2023
Operating Revenue	Thousand	4,466,308	4,221,836	4,535,610	5,061,606	5,505,542
R&D Expense	Thousand	298,552	261,597	287,595	353,436	310,438

## Patent and Brand Deployment

To facilitate successful R&D and product launches, TTY has filed corresponding patent and trademark applications. By the end of 2023, the Company had a total of 5 invention patents, 206 registered trademarks, and 8 trademark applications under review.

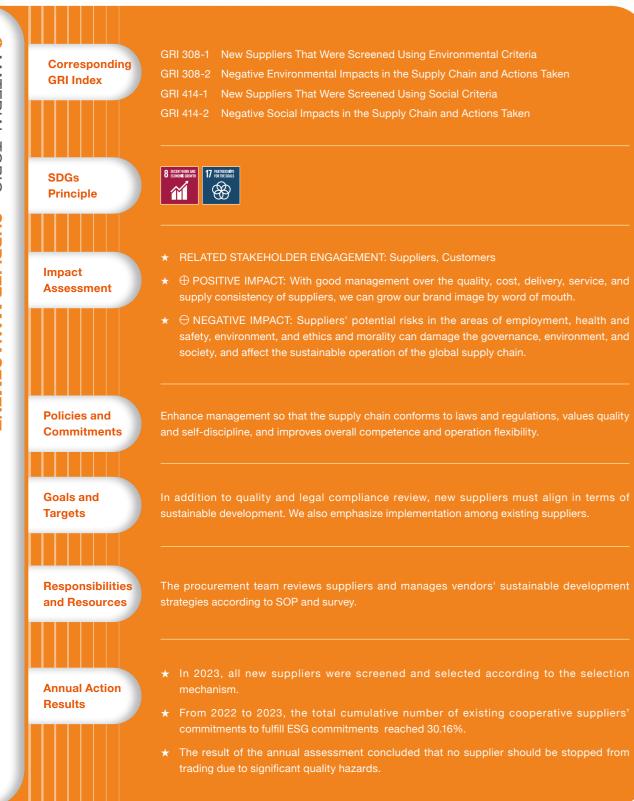
#### Regional Distribution Statistics of TTY's Valid Patent and Trademark Applications

	Area	Taiwan	Japan	Korea	China	Southeast Asia	Others	Total
Number of Invention Patents	Certificates claimed	5	0	0	0	0	0	5
	Under application	0	0	0	0	0	0	0
Number of	Certificates claimed	123	0	8	20	38	17	206
Trandmark Patents	Under application	4	0	0	0	4	0	8

Note: Statistics as of 31/12/2023

TTY is considered one of the few pharmaceutical R&D and manufacturing companies in Taiwan that provides a onestop service from front-end R&D to manufacturing to sales. The organization's R&D capability is at the forefront in Taiwan, having spent over NTD\$1.5 billion in R&D in the recent 5 years. Approximately 6% of its annual revenue is allocated towards R&D each year. In 2023, R&D expenses amounted to NTD\$310,438 thousand, which is 5.6% of total revenue. In the future, TTY will leverage the strengths of these platforms, invest resources, and develop products for various diseases such as those related to the blood-brain barrier, hormones, mental health, and other related diseases. Additionally, it will expand the drug indications to prolong product life cycles while continuing to allocate 6% of its annual revenue to R&D investment.

# SUPPLIER SCREENING AND MANAGEMENT



## Eligibility of New Suppliers & ESG Selection and Survey

Active pharmaceutical ingredients (API) are substances extracted from natural plants, synthesized chemically, and then processed by the Company's high-quality technology to create a universally approved and certified safe drug that can be used directly by patients. API, or Active Pharmaceutical Ingredient, is a crucial component of drugs that determines their safety and effectiveness. Therefore, TTY, as a responsible corporation, cautiously inspects and manages EU and US brand-name drug suppliers. We use Drug Master File (DMF), current Good Manufacturing Practice (cGMP), and Pharmaceutical Inspection Co-operation Scheme (PIC/S) GMP as the primary criteria for selecting the appropriate suppliers. We also conduct a thorough examination and assessment of their manufacturing of raw materials, product risks, competency in quality system control, and order execution.

To ensure environmental sustainability, TTY provides a survey to new and existing material suppliers, as described in the Supplier Assessment Guidelines. The survey includes management of API factories and suppliers of each TTY site and ESG questionnaires, regarding proper recycling of solvents, cleaning procedures and validation of production

#### Quality Assurance

Assessment and onsite due diligence to ensure a quality system and supply.

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### Stable Production Capacity

Multiple suppliers are required to maintain a flexible and stabilized supply and quantity.

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equipment, pest and rodent control, proper air conditioning, and a water system to avoid cross-contamination. It also includes a SOP to minimize environmental impact, and evaluation and continued strengthening of, and compliance with, control concerning environmental risks. All fields must be approved by a professional consultant. Moreover, TTY conducts ad-hoc audits on all suppliers based on a review plan to ensure consistent quality. Inspections are carried out either by questionnaire or on-site inspection.

We evaluate our suppliers based on their financial condition and their ability to manage their organization while fulfilling Corporate Social Responsibility (CSR) against four policies - Quality Assurance, Stable Production Capacity, Cycle Time Reduction, and Sustainability. Our advanced Supplier Management Mechanism ensures that we select potential suppliers based on their qualifications, renew existing suppliers, and assess, grade, manage, and offer correction guidance for potential risks. This mechanism ensures that our partnership with vendors is sustainable and transparent. Starting in 2023, all new suppliers were selected based on this selection mechanism.

#### **Cycle Time Reduction**

Credible suppliers with qualified delivery capabilities are needed to promote cycle time reduction.

#### Sustainability

Establishing long-term partnerships is crucial to building stable developments and creating a sustainable supply chain. TTY requires its suppliers to follow ecofriendly practices and prioritize safety, security, human rights, and corporate social responsibility. Additionally, suppliers must engage in risk management and have a sustainable operational plan.

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## **Evaluation for Existing Suppliers & Classification Management**

- · General evaluation: Scores are deducted for any abnormality of material delivered by suppliers and referred to for annual evaluation.
- Suppliers' assessments are held annually, and these assessments include Cycle Time (on time, credibility), Quality (stable supply quality), Customer Complaints (whether have significant mistakes, timely improvement of customer quality complaints); Supportiveness (speedy and immediate return and exchange of goods); and Sustainability (environmental protection and human rights assessment).
- The on-site audits and paper review results are categorized to grade and manage our suppliers.
- Suppliers failing to meet TTY's requirements are terminated from the purchase contract and subsequently removed from the supplier list.

#### Grading and Management for Chungli and Lioudu Suppliers

Grade	Risk	Scores	Measures
Grade A	Low	90~100	<ol> <li>Supplier to be considered when new items are required to be purchased.</li> <li>"Paper review" based inspection.</li> </ol>
Grade B	Medium	70~89	<ol> <li>Normal purchase contract.</li> <li>Paper review-based inspection. Suppliers should provide an action plan according to the inspection results. When improvements fail to meet TTY's requirements, an on-site inspection will be conducted.</li> </ol>
Grade C	High	≦69	<ol> <li>Discontinue purchasing items from the supplier.</li> <li>Deemed disqualified and the contract is terminated.</li> </ol>

Note: The results for the Neihu factory supplier assessment are classified as pass or fail. Those who fail to pass will be disqualified as a supplier.

The 2023 review and investigation at Chungli, Lioudu, and Neihu sites reported no suppliers achieving a Grade C or who did not qualify. No obvious negative impact was discovered during the environmental and societal (human rights) assessment.

## Paper Review

Other than routine quality surveys, the Taipei headquarters and purchase teams each perform a Sustainable Supplier Review as well as giving an assessment score. Each site then selects the suppliers it needs. The Sustainable Supplier Review survey contains the following.

Economy	Quality
<ol> <li>Operation Overview</li> <li>Client Management</li> <li>Safety Stock, Delivery Time</li> </ol>	<ol> <li>Management of Source Suppliers</li> <li>Quality Control</li> <li>Drug Master File</li> <li>Relevant GMP Compliance</li> <li>GDP Compliance</li> </ol>

## **Onsite Inspections**

Suppliers are to provide the following information for onsite inspections:

- · Company Introduction: product supply, capacity, process description, facility, and equipment introduction.
- waste control, and cross-contamination prevention.
- environmental management system (ISO 14001).
- management, change management, and corrective and preventive action.
- Raw Material Information: SDS and COA, production procedure.

#### Human Rights 1. GHG Emissions 1. Occupational Safety and Health 2. Water Resource Management 2. Worker Health Improvement 3. Energy Management 3. Welfare Policy 4. Waste Management 4. Feedback Channels 5. Overall Environmental Evaluation 5. All Forms of Discrimination 6. Environment, Safety, 6. Compliance with Laws and Health and Regulations 7. Compliance with Laws and Regulations

• Environment, Safety and Health Management: information regarding overall environmental safety, health control and management,

• Certificates and Licenses: acquired government or global certified QC documents (PIC/S GMP or ISO 9001) and certification of the

• Quality System Management: a document for the procedure of handling CCs (Customer Complaints), defects, abnormality



Qualified suppliers of the Chungli factory include 588 raw material suppliers (OEM included) and 107 manufacturers, of which 125 are raw materials (API and Excipient) and 463 are materials. There were 15 additions in 2023, of which 3 comprised raw materials and 12 material suppliers.

The 318 items purchased in 2023 by the Chungli factory were assessed based on cycle time, quality, customer complaints, supportiveness, and sustainability. The results indicated 314 classified as Grade A, 4 as Grade B, and none as Grade C. The management measures for suppliers of grade A items apply if the company launches new items; these suppliers would be prioritized, and the results provided to the quality control department for exemption from testing and evaluation of raw materials.

#### 2023 TTY Chungli Factory Supplier List

Category	API	Excipient	Packing Material	Total
Number of items	33	92	463	588
Number of manufacturers	24	44	39	107

#### 2023 TTY Chungli Factory Items Classified Assessment Results

Category	API	Excipient	Packing Material	Total
Grade A Supplier (lowest risk)	24	58	232	314
Grade B Supplier (moderate risk)	0	2	2	4
Grade C Supplier (highest risk)	0	0	0	0
Total	24	60	234	318



Qualified suppliers of the Lioudu factory include 466 raw material suppliers and 178 manufacturers, of which 214 are raw materials (API and Excipient) and 252 are material suppliers. There were 33 additions in 2023, of which 8 were raw materials and 25 were material suppliers.

#### 2023 TTY Lioudu Factory Supplier List

Category	API	Excipient	Packing Material	Total
Number of items	84	130	252	466
Number of manufacturers	64	69	45	178

#### 2023 TTY Lioudu Factory Items Classified Supplier Assessment Results

Category	API	Excipient	Packing Material	Total
Grade A Supplier (lowest risk)	50	90	190	330
Grade B Supplier (moderate risk)	0	0	0	0
Grade C Supplier (highest risk)	0	0	0	0
Total	50	90	190	330

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The 330 items purchased in 2023 by the Lioudu factory were assessed based on quality and customer complaints. The results indicated that 330 classified as Grade A, 0 as Grade B, and 0 as Grade C. Follow-ups and improvement will be required for Grade B suppliers, and these suppliers will be prioritized on the supervision list with increased review frequency in 2023 as necessary.



TTY employs both onsite inspections and paper reviews as methods to evaluate suppliers. Suppliers demonstrating close engagement with minimal deficiencies and consistently delivering high standards are identified as qualified suppliers. Conversely, suppliers exhibiting poor commitment, significant faults, or inconsistent performance are deemed disqualified, leading to their removal from the contract. In such cases, alternative sources of material will be sought upon request.

Qualified suppliers of the Neihu factory (removed the suppliers without trading or OEM within 2 years) include 56 raw material suppliers, 31 manufacturers, and 18 agents, of which 34 are raw materials (API and Excipient) and 22 are material suppliers. There was one additional material supplier added in 2023.

The 26 items purchased in 2023 by the Neihu factory were assessed based on quality and supportiveness. The results indicated that 26 were classified as eligible, and no suppliers failed the assessment.

### 2023 TTY Neihu Factory Supplier List

Category	API	Excipient	Packing Material	Total
Number of items	4	30	22	56
Number of manufacturers	4	18	9	31
Number of agents	3	10	5	18

### 2023 TTY Neihu Factory Items Classified Assessment Results

Category	API	Excipient	Packing Material	Total
Qualified items	2	19	5	26
Unqualified items	0	0	0	0
Total	2	19	5	26

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# **DRUG SAFETY**

**GRI Index** 

**SDGs Principle** 

0 MATERIAL TOPIC DRUG Impact Assessment SAFETY

Corresponding GRI 416-2 Incidents of Non-compliance Concerning the Health and Safety of Products and 3 AND WELL-BEING Suppliers and Media

- ★ ⊕ POSITIVE IMPACT: International compliance, the adoption of GMP, distribution, marketing of good drugs, and monitoring of drug safety contribute to quality, protected logistics, user
- ★ ⊖ NEGATIVE IMPACT: Mismanagement can severely endanger patient rights, leading to This can create crises and operational risks within the market.

Policies and Commitments

**Goals and** Targets

To facilitate patients' access to high-quality, safe and effective, and affordable medications, TTY set forth by the Taiwan Food and Drug Administration (TFDA) regarding safety information for safety standards.

★ CONTINUOUS GOALS

Distribution Practice for product distribution to ensure pharmaceutical manufacturing and sales processes meet standards, so that the company provides safe products for clinical

#### ★ MID- TO LONG-TERM GOALS

To realize the corporate vision of improving the quality of people's lives with scientific innovation, TTY actively accommodates medical needs through 3 business units:

Oncology Business Unit: Aims to offer cancer patients high-quality anti-cancer drugs, so that TTY can provide patients and physicians with optimal treatment plans.

Intensive Care Business Unit: Moving toward the emergency and severe diseases territory, as well as the approach of disease prevention actively.

Healthcare Business Unit: With vaccination, we expect to protect the communities from the occurrence and spread of influenzas; the nutritional supplements cater to the needs of different patients and improve people's health.

Responsibilities and Resources

based on thorough risk analysis.

### **Annual Action** Results

- Regulations for the Management of Drug Safety Surveillance.
- proper drug safety management.
- Reaction Reporting and have successfully passed the assessment.

Our consistent practice of Adverse Drug Reaction Reporting is realized through procedure and training. Specialists promptly report any adverse reactions within the specified timeframe to uphold drug safety standards. Notifications to the FDA are made within 15 days, and medical monitors assess the reported data to identify potential safety signals. Response actions are then determined

Distribution Practices, and 100% of its primary products are subject to health and safety regulatory audits. No product or service has been found to have violated health and safety-

in drugs, we guarantee that the production processes and quality standards in the country of origin adhere to both Taiwan's drug manufacturing regulations and those of the respective regulations and meet the quality and manufacturing specifications of the export destination

★ According to the TFDA's Reporting Regulations for Reporting Severe Adverse Drug Reactions, it collects safety information on drug products and completes reporting within a specified time

★ The well-established drug safety monitoring system continues to monitor risk control measures. Regular drug safety reports are submitted by designated deadlines and are aligned with

★ We observe drug safety monitoring and follow personal data protection and other applicable

★ Our 100% compliance with "Regulations for Reporting Severe Adverse Drug Reactions" ensures

★ All employees at TTY have undergone comprehensive internal training on Adverse Drug

To enforce drug safety management, TTY has allocated substantial resources across the drug research and development, production, storage, and labeling processes, ensuring the safety of our products. In addition to implementing various safety control measures for licensed-in and authorized drugs, as well as brand generic drugs, TTY has pioneered featured products utilizing liposome and microsphere coating, along with long-acting sustained-release injection technology, aimed at minimizing the body's drug burden. Furthermore, all TTY-sold drugs are accompanied by a package insert containing usage instructions as mandated by law, with the package insert also available for reference on our official website.

#### Safety Control Measures by TTY

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- Before introducing licensed-in and authorized drugs, TTY first evaluates the approval status of drugs in various countries around the world, for instance, if the drugs have been approved by the US Food and Drug Administration (FDA), the European Medicines Agency (EMA), or any of the other top 10 advanced pharmaceutical countries.
- If a drug requires clinical trials in Taiwan before its launch, TTY ensures compliance with the law by conducting these trials. We evaluate both efficacy and side effects based on the test results to substantiate the effectiveness and safety of our products. Dedicated personnel are assigned to monitor drug safety throughout the process.
- After the drug is launched, incidents of adverse drug reactions are evaluated, and a real-time reporting mechanism is established. A reporting mailbox for adverse drug reactions is also set up at: drugsafety@tty.com.tw.

#### Brand Generic Drugs

- Brand generic drugs include oncology and anti-severe infection drugs.
- For generic drugs that need to undergo bioequivalence, TTY will conduct bioequivalence tests in accordance with the Bioavailability and Bioequivalence Studies Regulations to apply to the central health authority for marketing authorization of such generic drugs.

## PIC/S GMP Certifications

Products in the pharmaceutical industry are closely related to the health and safety of users so safety and effectiveness must be particularly reviewed. TTY follows the most stringent PIC/ S GMP standards recognized around the world, and safeguards are in place for raw material supply, plant facilities, and equipment from the source of drug manufacturing. Production and quality control operations are also ensured via the prevention of cross-contamination, avoidance of confusion, validation, and other methods in the process to guarantee the continuous and stable manufacture of drugs. By the end of 2023, TTY obtained a total of 139 drug licenses, while more than 35 pharmaceutical items are listed in the Taiwan National Health Insurance (NHI) Pharmaceutical Benefits and Reimbursement Schedule.

#### Statistics of Valid Drug Licenses of TTY in 2023

Business Unit	Domestic	Foreign	Subtotal
Oncology Business Unit (TOT)	41	60	101
Intensive Care Business Unit (TIT)	21	3	24
Healthcare Business Unit (THT)	9	5	14
Total	71	68	139

#### PIC/S GMP Inspection Certificate of TTY (Valid until 2025/09/30)



## Supply Chain Traceability



★ RELATED STAKEHOLDER ENGAGEMENT: Government, Investors, Customers, Employees,

★ ⊕ POSITIVE IMPACT: Managing a safe, traceable supply chain enables TTY to effectively minimize potential defects, recalls, and the return of products.

★ ⊖ NEGATIVE IMPACT: Failure to effectively manage the information and traceability of drug materials poses significant risks to the product supply chain, drug quality, and user safety.

Unwitting access to counterfeit and fake products within the supply chain presents significant challenges. To mitigate this risk, TTY exclusively procure raw materials from registered, meticulously documented, providing customers with full visibility into the drug supply chain. Practice (GMP) standards, our methods ensure traceability and uphold the safety and stability of

★ TTY, along with its API suppliers and logistic services are GDP-certified operators, ensuring quality and packaging integrity during storage and transportation, and deliver to customers within a reasonable timeline. Regular assessments and quality contracts maintain standards

★ We fortify logistics service management by employing GPS during product transportation. Drugs are driven to their designated medical establishment which notifies us if the delivery

## Cold Chain Management

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As the leading manufacturer of Liposomes in Asia, TTY enforces stringent control over API management, product storage, and cold chain logistics. This commitment ensures drug quality and stability meet international standards, safeguarding customer safety.

#### **API Management**

Despite Taiwan's API management not yet being under GDP, the Chungli factory has followed the international management system and is ready to follow potential regulations in Taiwan. API storage and management comply with the GDP of PIC/S GMP. Liposome is a product under cold chain management. Since the arrival at the factory, the API and excipient of Liposome are stored in a temperature-controlled warehouse until entering the manufacturing process.



#### **Product Storage**

Once the products are packaged, they are immediately stored in a warehouse at 2°C ~8°C. To ensure 24-hour temperature control, all refrigeration warehouses are equipped with 2 air conditioners and fans, so either can cover a faulty air-conditioner should the occasion arise. All refrigeration warehouse equipment has backup power to prevent equipment malfunction or power disruption.

General maintenance of refrigeration warehouses includes twice-daily inspections and continuous monitoring via data loggers and alarms. If temperatures deviate from the specified range, flashing lights and sound alarms activate, prompting security to notify relevant authorities. Access to refrigeration warehouses at the Chungli factory is restricted to authorized personnel only, minimizing temperature fluctuations caused by unnecessary entry and exit. Additionally, Temperature Mapping Qualification (TMQ) is conducted during the coldest and hottest seasons to ensure storage temperatures meet requirements.



#### **Cold Chain Product Transportation**

2°C~8°C end-to-end temperature control must be maintained during the transportation and delivery of Liposome to hospitals and clients. The warehouse and QC departments have conducted several visits and audits to find a qualified logistics company that can ensure the storage, delivery, and temperature control of LN2, gel packs, and dry ice. TTY has signed agreements with select logistics companies, which have been designated as qualified cold chain logistics suppliers.

Our Liposome products are transported from the refrigerated warehouse at the Chungli factory using specially designed refrigerated delivery boxes made from qualified materials. Each shipment includes clear guidelines on the maximum number of times ice can be used, its effectiveness period, and other standard procedures. Additionally, the package is sealed using TTY-logo void tape with a 3M Monitor Mark, ensuring security and integrity during transit. TTY invests nearly a million NTD annually on WHO-certified 3M Monitor Marks to uphold quality standards. There were no reported cases of abnormal temperatures in 2023.

Cold chain delivery by ground or by air to the Taiwan mainland, Kinmen, and Penghu should not exceed 24 hours from pickup to proof of delivery. 3 statistic tests and route dynamic tests are each performed for different box sizes, and the shortest delivery time should be selected and recorded as a standard for general transportation management. Validations should be run once every summer and winter to eliminate various factors affecting temperature changes during transportation.

#### **Continuous Improvement**

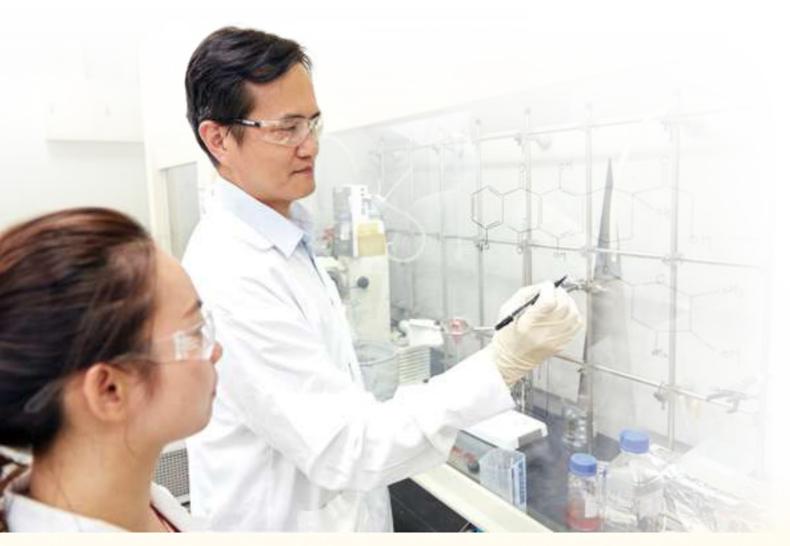
To enhance the stability of its cold chain, TTY has streamlined the design of coolers' inner boxes, standardizing the material and volume to simplify material and storage management. Preliminary comparisons and verifications conducted in 2022 have confirmed that the new inner box outperforms the original, offering more stable temperatures and longer thermal insulation. The full implementation of the new inner box is scheduled for January 2023 to ensure temperature stability during transportation and maintain product quality.

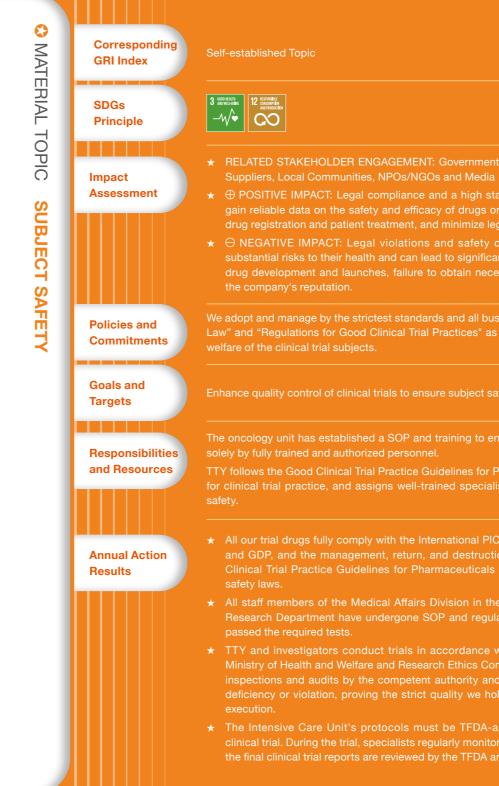
In addition, TTY expects to expand its refrigerated space in 2022 as a response to increased demand for inventory and in line with the optimization of the oncology plant's production line. Spring replacement of compressors, evaporators and controllers in Chungli factory in early 2023. The addition of ice packet makers prepared for the storage of cold chain products, and improve shipping of low temperature logistics.

## Subject Safety

The management and monitoring of research drugs adhere to the standards outlined in PIC/S GMP (Part I, Attachment 13 of the Good Manufacturing Practice for Pharmaceuticals in Taiwan), ICH E6 (Good Clinical Trial Practice Guidelines for Pharmaceuticals in Taiwan), and the standard operating procedures of the pharmaceutical research institute. All processes are documented in both written and electronic formats to ensure effective management and compliance.

Furthermore, to ensure subject safety, human research and clinical trials of cancer drugs undergo approval by both the ethics committee of the testing institution and the local health authority. They are conducted in strict accordance with the standard operating procedures of the medical academic division and comply with relevant domestic and foreign laws and regulations, including ICH E6 and human research laws. Insurance coverage is provided on a case-by-case basis. Potential risks, compensation for damage, and insurance details are explicitly outlined in the Informed Consent, allowing subjects to make informed decisions about participating in a clinical trial. In 2023, no TTY business group incurred monetary losses due to legal suits related to drug clinical trials in developing countries.





★ RELATED STAKEHOLDER ENGAGEMENT: Government, Investors, Customers, Employees,

★ ⊖ NEGATIVE IMPACT: Legal violations and safety concerns regarding subjects pose substantial risks to their health and can lead to significant costs. This may result in delays in drug development and launches, failure to obtain necessary licenses, and ultimately harm

We adopt and manage by the strictest standards and all business units follow "Human Research Law" and "Regulations for Good Clinical Trial Practices" as we are committed to the safety and

Enhance quality control of clinical trials to ensure subject safety, rights, and data credibility.

The oncology unit has established a SOP and training to ensure that clinical work is carried out

for clinical trial practice, and assigns well-trained specialists to execute work to ensure drug

★ All staff members of the Medical Affairs Division in the oncology unit and the TIT Clinical Research Department have undergone SOP and regulation training and have successfully

★ TTY and investigators conduct trials in accordance with the protocols approved by the inspections and audits by the competent authority and REC did not locate any significant deficiency or violation, proving the strict quality we hold regarding subject safety and trial

★ The Intensive Care Unit's protocols must be TFDA-and-IRB-approved to carry out any clinical trial. During the trial, specialists regularly monitor the progress. After trial completion,



## Drug Safety Surveillance Management & Adverse Reaction Reports

The TTY Drug Safety Team reports to TOT, TIT and THT. The team for the collaborations and coordination conducts according to the "Plan for the Management of Drug Safety Monitoring" to ensure the collection and report of drug safety information comply with the Pharmaceutical Affairs Act, Regulations of Drug Safety Surveillance Management, and Regulations for Reporting Severe Adverse Drug Reactions.

Plan for Drug Safety Surveillance Management	In compliance with the Regulations of finalized the Drug Safety Surveillance and responsibilities of TTY members activities, identifies sources and meth and reports on the implementation out
Education Training of Drug Safety Surveillance	In compliance with legal safety red employees and maintains records of received the required annual training,
Risk Management of Drug Safety	For the safety and risk of market-avail drug risk levels and Regulations of D with "Medical Professionals Commun available drugs that require risk ma minimize drug risks and safeguard pe
Mechanism for Reporting Severe Adverse Drug Reactions	<ul> <li>To file a report about a severe adversuse of the following channels.</li> <li>Medical specialists and the public website to reach out to the responsible personnel.</li> <li>Upon receiving reports, TTY reflection of the provide the prior of the</li></ul>

Available Drug Adverse Reaction Reaction Reporting"

of Drug Safety Surveillance Management, our Drug Safety Team has be Management for 2022. This comprehensive plan delineates the roles ars, outlines the planning, operation, and management of monitoring thods for collecting, analyzing, and controlling drug safety information, butcomes and quality of monitoring efforts.

equirements, TTY conducts annual online training lectures for all of this training. In 2023, all employees, including new hires in 2023, I, achieving a 100% completion rate.

ailable drugs, TTY applies drug risk management procedures following Drug Surveillance Management. We relay to the medical specialists nication Program" and "Special Risk Preventive Measures" for marketanagement, and provide "Drug medication instruction" to users to eople with good practice.

rse reaction after normal application of market-available drugs, make

lic may use the email address (drugsafety@tty.com.tw) on our official nsible team.

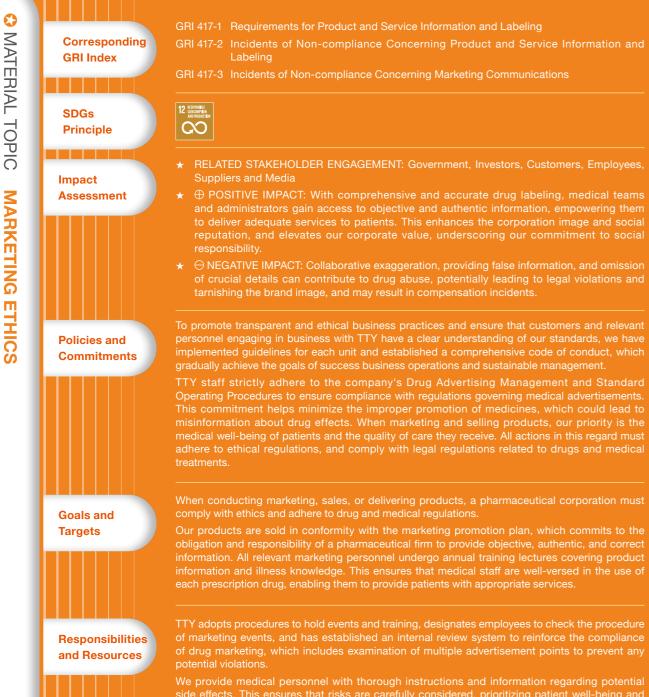
ic may look for the Report Hotline on our website to reach out to the

Upon receiving reports, TTY reflects them on https://adr.fda.gov.tw/ following "Guidance for Market Available Drug Adverse Reaction Reporting, and Guidance for Market Available Vaccine Adverse

# **RESPONSIBILITY OF SALES**

## Marketing Ethics

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- ★ RELATED STAKEHOLDER ENGAGEMENT: Government, Investors, Customers, Employees,
- ★ ⊕ POSITIVE IMPACT: With comprehensive and accurate drug labeling, medical teams and administrators gain access to objective and authentic information, empowering them reputation, and elevates our corporate value, underscoring our commitment to social
- ★ ⊖ NEGATIVE IMPACT: Collaborative exaggeration, providing false information, and omission of crucial details can contribute to drug abuse, potentially leading to legal violations and

To promote transparent and ethical business practices and ensure that customers and relevant personnel engaging in business with TTY have a clear understanding of our standards, we have implemented guidelines for each unit and established a comprehensive code of conduct, which gradually achieve the goals of success business operations and sustainable management.

TTY staff strictly adhere to the company's Drug Advertising Management and Standard Operating Procedures to ensure compliance with regulations governing medical advertisements. adhere to ethical regulations, and comply with legal regulations related to drugs and medical

When conducting marketing, sales, or delivering products, a pharmaceutical corporation must comply with ethics and adhere to drug and medical regulations.

Our products are sold in conformity with the marketing promotion plan, which commits to the information and illness knowledge. This ensures that medical staff are well-versed in the use of each prescription drug, enabling them to provide patients with appropriate services.

TTY adopts procedures to hold events and training, designates employees to check the procedure of marketing events, and has established an internal review system to reinforce the compliance of drug marketing, which includes examination of multiple advertisement points to prevent any

We provide medical personnel with thorough instructions and information regarding potential side effects. This ensures that risks are carefully considered, prioritizing patient well-being and **Annual Action Results** 

- procedures are in compliance by the marketing team and corporation.
- to ensure full compliance in operations and by employees.

All TTY products fully comply with the Regulations for Registration of Pharmaceutical Products on the labeling of products on outer packaging. The packagings are labeled with product ingredients and indications. The instructions, dosages, and precautions should be attached with the instructions. In 2023, no violation was made by TTY regarding product information, labeling regulations, and marketing communications for human use and animal use drugs.

#### TTY Marketing Regulations and Principles for Drug Sales

- Marketing information should be clear, easily understandable, accurate, balanced, and complete so that information receivers are capable of deciding the therapeutic effects of drugs. Content should be based on evidence, such as labeling approval of scientific proof, and not contain any false or exaggerated information.
- Medical personnel and administration staff are provided with samples or goods to help spread the knowledge of our products, which must be of a reasonable price and related to medical treatment.
- Free drug samples may be offered to medical personnel with the privilege of prescribing such drugs to facilitate patient care. Drugs offered must be explicitly labeled as samples to eliminate resale or repurpose.
- Product information should be conveyed accurately and transparently, with the primary purpose of hosting and/ or sponsoring medical conferences, seminars, marketing activities, and scientific or expert meetings being the dissemination of informed, scientific, or educational information,

★ All drug purchases in 2023 adhered to the Government Procurement Act, without violation of product information and labeling (such as the Pharmaceutical Affairs Act and Pharmaceutical communication (including advertisement, promotion, and sponsorship) regulations.

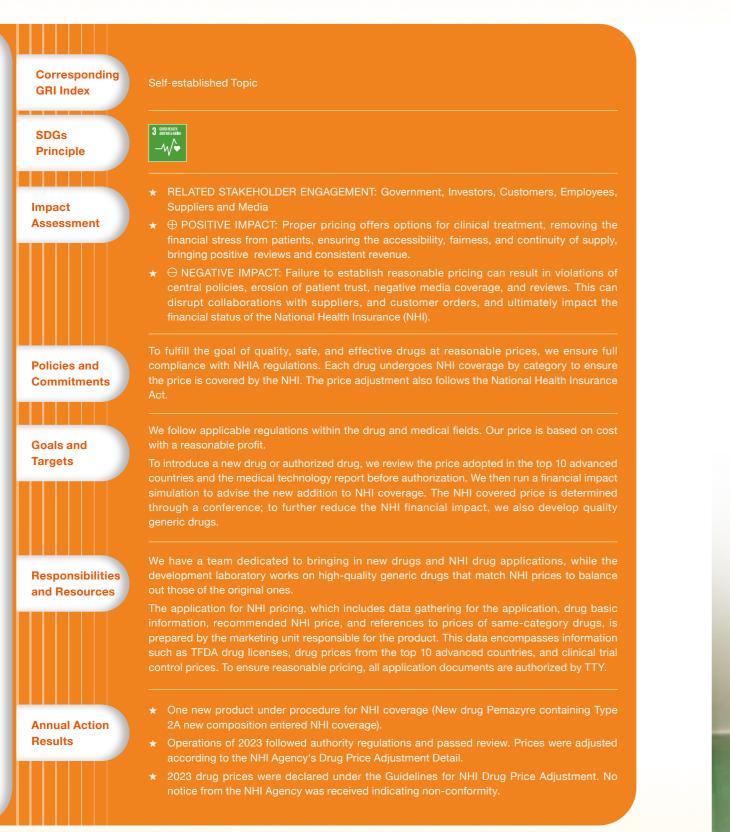
★ Online training includes drug safety monitoring and GDP management theory to eliminate potential drug violations. We have also reinforced our management mechanism. TTY drug advertisement checklist ensures that drug advertising management and standard operating

★ TOT regulates the marketing team to attend product knowledge refreshes at a minimum of 3

★ TIT makes annual reports to the internal audit regarding compliance matters. In 2023, advertisement marketing and a NHI drug price and adverse drug reaction reports were audited

★ In 2023, THT conducted 3 product knowledge courses with assessment tests; re-communication and procedures were made regarding advertisement and marketing and adverse drug reaction reports. All programs and implementations are under the guidance of central laws

- Medical personnel may be invited as consultants for paid meetings or activities, such as speeches, hosting or attending meetings, scientific studies, clinical trials, training programs, advisory board meetings, or market research purposes.
- Any interaction with patient organizations must be based on ethical regulations and respect the independence of the organizations.
- If marketing materials constitute drug advertising, the Ministry of Justice's approval shall be sought and the approval number marked on the materials as regulated. TTY staff have been following the Company rules and regulations in completing procedures and publishing advertisements.



#### TTY 2023 YOY Changes of Drug Sale Prices\*(Note1)

Business Unit	Portfolio (Number of Drugs)	Average Sale Price Changing Rate	Average Net Price Changing Rate	
Oncology Business Unit (TOT)	All Products (50)	-10.62%	-13.43%	
Intensive Care Business Unit (TIT)	All Products (9) <sup>(note 2)</sup>	-4.37%	3.62%	
	Anesthesia (1) <sup>(note 3)</sup>	-	-	
	Influenza Vaccine (2) <sup>(note 4)</sup>	0%	7.48%	
Healthcare Unit (THT)	Gastrointestinal Health Products (2)	0%	-0.79%	
	Osteoporosis Prevention (2)	0%	1.65%	
	Relieve Gout Symptoms (1)	0%	0.82%	
<ul> <li>Note: 1. Calculation: (average price of 2023 portfolios - average price of 2022 portfolio of same period)/average price of 2022 portfolio of same period</li> <li>2. TIT: Intensive Care Business Unit. The price increase in 2023 was caused by NHI's pricing covered one more of our drug products compared to the previous year, and that affected and increased the average net price for all items.</li> <li>3. TIT: Intensive Care Business Unit. Anesthetic drug is a new addition for 2023, and there was no changes from the 2022 recorded price.</li> <li>4. THT: Healthcare Business Unit. It is important to note that the addition of flu vaccines in 2023 is not factored into the average price change calculation. The prices of flu vaccines are comprised of 2 parts: NHI coverage and self-pay. In 2023, there was an increase in self-pay purchases, which caused the average price to go up in comparison to the price in 2022.</li> </ul>				
i A				

MATERIAL TOPIC REASONABLE PRICING

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hours in 2023. culture. attendance rate.

# CHAPTER GOVERNANCE

- Governance Structure
- Governance Principles
- Risk Management



★ TTY has been ranked among the **6%~20%** of TPEx-listed companies in the 10th TWSE Corporate Governance Assessment.

★ 7 board meetings were convened in 2023, with an attendance rate of 100% (excluding attendance via proxy).

 $\star$  The average advanced training of board members reached **10.33** 

★ The board comprises 2 female directors and 3 independent directors, which shows a diversified and independent governance

★ The Remuneration Committee convened 2 meetings in total, and all members attended these meetings in person, resulting in a 100% attendance rate.

★ The Audit Committee also held 5 meetings, with all members attending these meetings in person for a 100% attendance rate.

★ In 2023, the Company did not receive any penalties for illegal incidents or violating any of the relevant laws and regulations.

TTY closely monitors long-term investment market trends to determine whether an investment is profitable while considering environmental, social, and corporate governance factors. Additionally, TTY adheres to the OECD Principles of Corporate Governance published by the Organization for Economic Cooperation and Development to ensure the effective implementation of corporate governance.



TTY's directors are committed to creating value for stakeholders and contributing to global sustainable goals. The Company advocates the 17 sustainable development goals (SDGs) of the United Nations in terms of corporate governance.

To facilitate SDG 5 "Gender Equality," the Board of Directors has introduced the Taiwan Intellectual Property Management System (TIPS) to improve the intellectual property confidentiality management system. This echoes SDG 9 "Industry, Innovation, and Infrastructure." The Sustainable Development Committee and the Ethical Management Promotion Center (EMPC) are implementing a corporate sustainable operational development to respond to SDG 11 "Sustainable Cities and Communities." To meet SDG 16 "Peace, Justice, and Strong Institutions," the Company has established a system to prevent Interest Avoidance and implement independent supervision, ethics, and integrity. Finally, in response to SDG 17 "Partnerships for Goals," TTY follows international trends, implements risk evaluation and management, and fosters global sustainable development partnerships.



# **GOVERNANCE STRUCTURE**

## Diversity and Professionalism of the Board of Directors

At TTY, we strongly believe in the concept of integrity and value the interests of our shareholders. Our commitment to transparency and effectiveness is reflected in the composition of our Board of Directors, which forms a solid foundation for sustainable business practices. We are proud to have a diverse group of directors with different backgrounds and professional competencies that cater to TTY's business and development needs. They are all aligned with the Company's core value of integrity and possess expertise and skills covering a range of areas, including biotechnology, financing, banking, business, law, finance, and accounting. These competencies are essential for a functional board to maximize profits and supervise fraud prevention, ensuring the Company operates sustainably.

The board of directors comprises 9 members, ranging in age from 31 to 80, with 2 female members (22.22%) and 3 independent directors (33.33%). The current term started on 25/8/2021 and will end on 24/8/2024. The board members,

#### TTY's Board Members in Year 2023

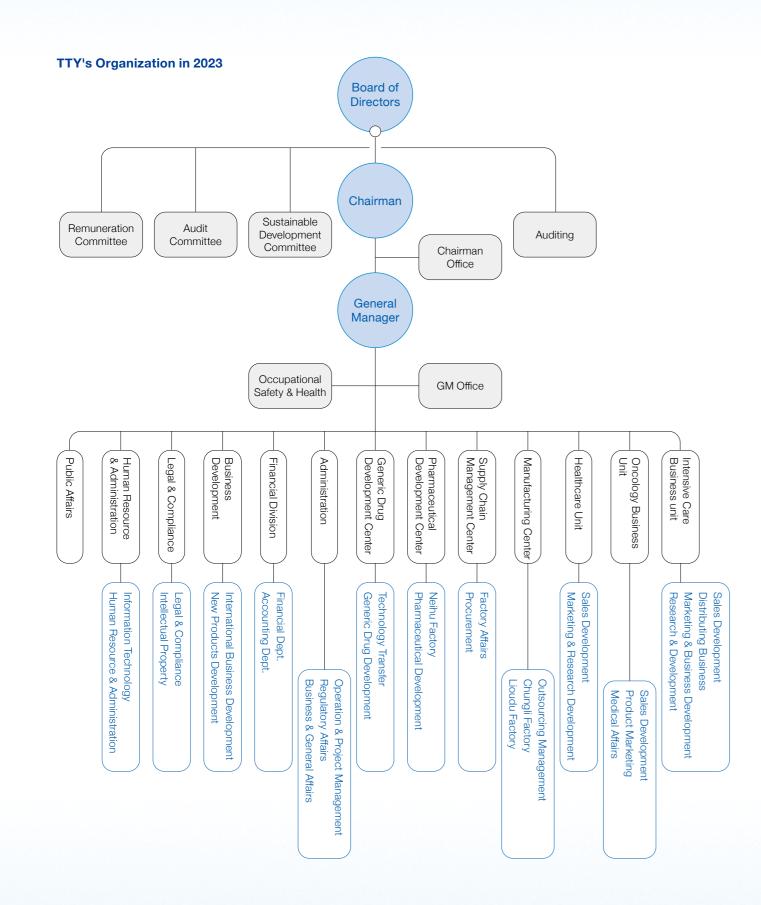
	Title	Name	Gender
Chairman Vice Chairman		Lin Chuan	<b>Q</b>
		Chang Wen-Hua	Ŷ
		Carl Hsiao	Ŷ
		Yang Tze-Kaing	Q
	Directors	Chang Hsiu-Chi	Ŷ
		Liao Ying-Ying	Ŷ
		Tsai Duei	<del>Q</del>
	Independent Directors	Hsueh Ming-Ling	Ŷ
		Lin Tien-Fu	Ŷ

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hailing from Taiwan and the USA, represent both genders and bring a range of ages and expertise to the table. They are competent in business strategy and decision-making, with a focus on the economy, environment, and society. The board also acts in a supervisory capacity for the operating team and risk management. In 2023, TTY convened 7 board meetings, all attended by the directors in person, with an attendance rate of 100%.

The board oversees the Audit, Remuneration, and Sustainable Development Committees, each with a dedicated function to optimize the board's performance. The functional committees assist the board in supervising and managing the Company's vital activities, deciding on the overall remuneration policy and compensation for directors and managers, and facilitating plans and strategies for corporate sustainability. The CEO oversees the Occupational Safety and Health Team, 3 business groups, 4 centers, and other departments, each with its detailed role outlined in TTY's annual report.

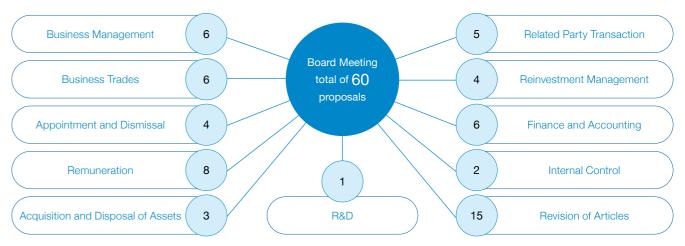
Nationality	Age Group	Times to Attendance
	71-80	7
۲	61-70	7
	31-40	7
*	61-70	7
۲	61-70	7
	61-70	7
۲	71-80	7
۲	61-70	7
۲	71-80	7



#### Board Meeting Resolution

The board meetings was held 7 times in 2023; an average of once every 2 months. All directors attended these meetings in person, with an attendance rate of 100%. The performance of the Company and key ESG strategies and events were reviewed during these meetings, and the authorities for each

#### **TTY's Board Proposals in 2023**



#### Nomination and Selection of Board Members

On April 23, 2021, Lin Chuan, Chang Wen-Hua, Carl Hsiao, Yang Tze-Kaing, Chang Hsiu-Chi, and Liao Ying-Ying were nominated as board members by the board. Additionally, Tsai Duei, Hsueh Ming-Ling, and Lin Tien-Fu were nominated as independent directors. The nomination process ensured that the nominees for independent directors met the criteria of professionalism, independence, and concurrent serving restrictions as outlined in the Regulations Governing the Appointment of Independent Directors and Compliance Matters for Public Companies. Subsequently, under these regulations and the Company Act, these nominees were shortlisted for positions as directors and independent directors for 2021. Finally, on August 25,2021, all 9 nominees, including 3 independent directors, were elected as directors during a regular shareholders' meeting.

On January 15, 2018, the board decided to appoint Lin Chuan as chairman. He was subsequently re-elected for another term during a board election at a shareholders' meeting held on August 25, 2021. Mr. Lin's extensive background in economics, taxation, and financial matters, coupled with his prior experience as the CEO of

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matter were appointed and verified. The follow-up, supervision of progress, and updates were reviewed in consequent meetings. In 2023, the board discussed over 60 matters spanning 11 perspective matters, including the revision of articles, business management, finance and accounting, related party transactions, remuneration, and other key events.

a research organization, college instructor, and public official, as well as his tenure as chairman, director, and independent director of numerous listed companies (including VIS, Chartis Taiwan Insurance, Pegatron, Casetek Holdings, and Inotera Memories, among others), uniquely qualified him for the position.

Since 2011, Mr. Lin has held the position of chairman and remains dedicated to advancing biotechnology in Taiwan. His commitment is evidenced by his election as a director of PharmaEngine, a pioneer in novel drug development, in 2015. With extensive expertise in pharmaceutical drug development, innovation, manufacturing, and marketing, Mr. Lin brings a global perspective and profound understanding of corporate governance to the table. His invaluable insights are expected to contribute significantly to TTY's market strategy, manufacturing objectives, industry consolidation, mergers, and lean management practices. Under his leadership, TTY is actively pursuing international opportunities and aspires to set a standard for pharmaceutical companies, establishing itself as an industry leader in Taiwan. Mr. Lin's decision-making process, business management, strategy proficiency, and crisis-handling capabilities are welcomed as TTY enters this new chapter.

Throughout his tenure as chairman, Mr. Lin has provided comprehensive guidance and advice on business management and investment decisions, aiding TTY in enhancing its corporate governance. His re-election demonstrates the continued confidence in his leadership. Please refer to the annual report for various metrics that illustrate the Board of Directors and its functional committees' commitment to core values.

#### Interest Avoidance

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TTY's adoption of the Board of Directors Rules of Procedure for Board Meetings follows the Regulations Governing the Procedure for Board of Directors Meetings of Public Companies and emphasizes the avoidance of conflicts of interest among directors. To address potential conflicts of interest, particularly if a director holds a position in counterparty, TTY implements measures to prevent and mitigate such conflicts. Directors are reminded in meeting notices to disclose any significant stake they may have in matters being discussed, especially if there is a potential conflict between a proposal and their personal interests or the interests of the corporation they represent. If a conflict of interest is likely to compromise the Company's interests, the director in question abstains from participating in discussions, voting, or representing another director's voting rights. Through the comprehensive system of avoidance of conflicts of interest, the board members required self-discipline and prudence to fulfill their ethical obligations as managers, and to execute business faithfully. In 2023, TTY reported 8 instances of practices aimed at avoiding conflicts of interest during board meetings, and the board members involved in relevant affairs were practically avoid the conflicts of interest. All practices for avoiding conflicts of interest concerning proposals discussed during board meetings are fully disclosed in the annual report.

#### Board Performance Evaluation

TTY conducts annual performance self-evaluations of the

Board of Directors, functional committees, and individual directors. Additionally, every 3 years, TTY engages an external professional, independent institutes, or experts and scholars to conduct evaluations. The Remuneration Committee utilizes the results of these evaluations, both internal and external, to recommend remuneration payment standards and precise amounts, and these recommendations are based on the overall operating performance of the Company, serving as the evaluation basis.

Since 2016, TTY has implemented self- and peer evaluations among directors and the board, with annual evaluations submitted for review by the board in the following Q1. In 2023, the average score for the performance self-evaluation of the Board of Directors was 4.95 out of 5 points, while directors achieved an average score of 4.97 out of 5 points. Furthermore, the performance self-evaluation of all 3 functional Committees received full scores. These evaluation results were promptly submitted to the Remuneration Committee on March 8, 2024. Both the Board of Directors and the functional committees have demonstrated favorable performance.

In addition to self-assessment of the board and functional committees, external professional and independent institutes, experts, and scholars are engaged to assess the Company's governance according to the Regulations for the Assessment of the Performance of the Board and Functional Committees every 3 years. For the period from September 1, 2020, to August 31, 2021, TTY commissioned the Taiwan Corporate Governance Association to conduct an evaluation. The board assessment was divided into the 8 areas of the composition of the Board: instruction, authorization, supervision, communication, discipline, inter-control, and risk management, and was conducted through a questionnaire and field interviews. For detailed summaries and suggestions provided by the Taiwan Corporate Governance Association, as well as the corresponding actions taken by the company, please refer to TTY's official website.

#### Summary of the Board Performance Evaluation

The Chairman respects the proficiencies of the directors. He especially consults independent directors for their opinions and a third-party perspective to improve decision-making. The 3 independent directors play an active role in fostering a positive Board meeting culture.

TTY has established a Sustainable Development Committee subordinated to the board. This committee reports on the implementation of work projects and outlines plans for the upcoming year by the year's end. This proactive approach enhances communication and coordination across all units, with a particular emphasis on strategic initiatives in corporate sustainability and social responsibility.

TTY organizes board gatherings and extends invitations to the board for ad-hoc visits to factories. The management team closely interacts with the board, facilitating comprehensive operational initiatives.

#### Enhancing Directors' Knowledge

To capitalize on opportunities arising from global risk trends and to enhance their understanding of economic, environmental, and social issues, the TTY board members aggressively participate in various advanced training courses to create maximum operational value for all stakeholders. In 2023, the average number of advanced training hours of board members was 10.33 hours.

#### Advanced Training Courses Attended by Directors in 2023

Title	Name	Study Date	Course	Hour(s)	Total Hour(s)	
		2023/09/21	Development Status of Global Carbon Rights and Carbon Trading	3		
		2023/10/13	Trends in Digital Technology, AI, and Risk Management	3	-	
Chairman	Lin Chuan	2023/11/14	Discussion of Cross-Straits Relations and Climate Concerns with Risk Management in Mind	3	12	
		2023/11/24	Legal Matters Concerning Enterprises Through the Supervision and Guidance of the Board of Directors: Exercise Caution and Avoid Crossing the Red Line When Engaging in Joint Actions	3	-	
Vice	Chang	2023/09/13	Analysis of the Key Points of the Corporate Governance Appraisal to be Considered by the Directors and Supervisors	3	6	
Chairman	Wen-Hua	2023/11/14	Emerging Money-laundering Models and Regulatory Trends	3	C	
		2023/11/09	Exploring Fraud Concerning Enterprises' Financial Statements	3	_	
Director Carl Hsiao		2023/11/24	Legal Matters Concerning Enterprises Through the Supervision and Guidance of the Board of Directors: Exercise Caution and Avoid Crossing the Red Line When Engaging in Joint Actions	3	6	
	Veee	2023/07/19	Impact and Opportunities Introduced by AI to the Industry	3		
Director	Director Yang — Tze-Kaing		Discussion of Cross-Straits Relations and Climate Concerns with Risk Management in Mind	3	6	
		2023/10/13	Trends in Digital Technology, AI, and Risk Management	3		
Director	Chang Hsiu-Chi	2023/11/24	Legal Matters Concerning Enterprises Through the Supervision and Guidance of the Board of Directors: Exercise Caution and Avoid Crossing the Red Line When Engaging in Joint Actions	3	6	
		2023/10/13	Trends in Digital Technology, AI, and Risk Management	3		
Director	br Liao Ying-Ying	2023/11/24	Legal Matters Concerning Enterprises Through the Supervision and Guidance of the Board of Directors: Exercise Caution and Avoid Crossing the Red Line When Engaging in Joint Actions	3	6	

Title	Name	Study Date	Course	Hour(s)	Total Hour(s)	
		2023/04/13	Business Opportunities and Challenges Amidst the Trend of "Net Zero"	3		
		2023/05/16	Future Global Risks and Opportunities for Sustainable Transformation	3	-	
Independent	Tsai	2023/08/09	Doing Right, Doing Good for Public Welfare of the Truth, Goodness, and Beauty, then it is a Good Business.	ess, 3	15	
Director	Duei	2023/10/13	Trends in Digital Technology, AI, and Risk Management	3	-	
		2023/11/24	Legal Matters Concerning Enterprises Through the Supervision and Guidance of the Board of Directors: Exercise Caution and Avoid Crossing the Red Line When Engaging in Joint Actions	3		
		2023/03/10	Weird Global Economy of 2023	1		
		2023/03/16	Practice of Anti-money Laundering and Counter-terrorist Financing, and Advocacy of Directors' Legal Obligations and Responsibilities	3	-	
	dent Hsueh Ming-Ling	2023/05/18	Financial Consumer Protection Act and Treating Customers Fairly	3	-	
		2023/05/25	Case Sharing on Strengthen ESG Senior Supervisors' Remuneration and ESG Performance Linkage by the Board of Directors	1		
		2023/07/27	Role of Financial Decision-making in Corporate Management	1	-	
Independent Director		2023/08/30	Impact of Chat GPT on the Industry and Responsive Measures	1	21	
		2023/09/01	Exercising the Professional Functions of Independent Directors with a "Constructive Mindset"	1		
		2023/09/07	Assistance and Impact of Emerging Cybersecurity Technologies on Financial Digital Innovation	3		
		2023/10/13	Trends in Digital Technology, AI, and Risk Management	3		
		2023/10/30	Attentions for Business M&A	3		
		2023/12/28	Wangdao Accounting Management and Corporate Governance	1		
		2023/06/07	Domestic and Foreign Laws Related to Preventing Money Laundering and Counter-terrorist Financing and Risk Trends with Manner	3		
		2023/07/13	Net Zero Carbon Emissions and Corporate Governance	3	- 18	
Independent	-	2023/09/06	ESG Investment Principles and Strategies	3		
Director	Lin Tien-Fu	2023/09/06	New Era of AI: Taiwan's Opportunities and Challenges	3		
	-	2023/09/07	Assistance and Impact of Emerging Cybersecurity Technologies on Financial Digital Innovation	3		
		2023/10/05	Discussion of Principle of Friendly Services and Financial Exploitation Based on the Principle of Treating Customers Fairly	3		

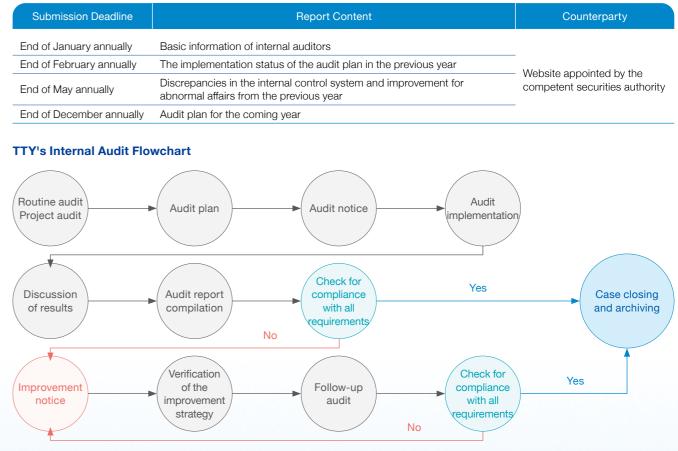
## Internal Control and Audits

### Internal Audit Organization and Operation

TTY manages internal audit affairs according to the Guidelines for the Establishment of Internal Control Systems of Public Companies, as long as in compliance to the domestic regulations of environmental, intellectual property, and drug advertising management. Furthermore, based on the evaluation requirements of foreign assessment institutes evaluate for corporate ESG implementation, we develop our own audit items and plans based on different operating cycle categories. The audit office, under the Board of Directors, is responsible for internal audits. The audit office has a chief auditor and a team of auditors tailored to the company's scale, business dynamics, management needs, and relevant laws and regulations. Internal auditors work autonomously to prepare the annual audit plan, identify monthly, quarterly and annual audit targets, and assess the internal control system.

### **TTY's Internal Audit Reporting Status**

Submission Deadline	Report Co
End of January annually	Basic information of internal auditors
End of February annually	The implementation status of the audit p
End of May annually	Discrepancies in the internal control sysi abnormal affairs from the previous year
End of December annually	Audit plan for the coming year



Upon the Board of Directors approval, audit reports, including any discrepancies found, are submitted. Audited business units are required to propose improvement measures, which are detailed in the audit report. Discrepancies and abnormalities are monitored, and the internal audit regularly report to the Audit Committee, which also attended the Board of Directors to report.

The Company has also stipulated that the employment, assessment, and remuneration of internal auditors be based on employment, the performance development plan and performance bonus assessment, and salary management regulations in accordance with the Internal Audit System. Except for the employment of the chief internal auditor, which is approved by the Audit Committee before submission to the Board of Directors for approval, all remaining items shall be reported by the chief auditor to the Chairman for approval. Internal auditors shall be qualified and competent for the role, and engage in advanced training hours as required sustainably.

#### Types of Audits and Handling Status

The main audit aspects at TTY encompass "Operation," "Environment," and "Legal and Compliance," each consisting of various audit items. Audits are conducted according to

scheduled frequencies, including routine yearly, quarterly, and monthly audits mandated by laws and regulations. Additionally, irregular audit items are addressed annually, even if not specified in relevant laws and regulations. In the audit findings for 2023, no abnormalities were identified.

#### **TTY Operation**

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Per Cycle	Audit Items/Frequency	Auditee
Cycle of Sales and Receipts	<ul> <li>Order processing, shipment, invoice issuance, and return of sold goods/Yearly</li> <li>Customer management /Yearly</li> </ul>	Sales Administration Department, Financial Division, Warehouse Management Department
Cycle of Purchasing	<ul><li>Purchasing /Yearly</li><li>Contract management /Yearly</li></ul>	Financial Division, Quality Assurance Division, Procurement Division, Production Planning Division
Cycle of Production	<ul><li>Safety and health operation/Irregularly</li><li>Order receiving and OEM work/Irregularly</li></ul>	Manufacturing Center
Cycle of Payroll	<ul><li>Attendance operation/Irregularly</li><li>Successor operation/Irregularly</li></ul>	Human Resources and Administration Division
Cycle of Financing	Reimbursement of general expenses and change fund operation/Irregularly	Financial Division
Cycle of Property, Plant, and Equipment	Disposal (sale, scrap, lease, transfer, and donate) of property, plant, and equipment/Irregularly	General Affairs, Accounting Department
Cycle of Investment	Acquisition or disposal of assets/Yearly	Financial Division
Cycle of R&D	<ul><li>R&amp;D project management/Irregularly</li><li>R&amp;D achievement management/Irregularly</li></ul>	Regulatory Affairs, Intellectual Property, Operation and Project Management
Computer Processing	Cybersecurity inspection/Yearly	Information Technology
	Regulatory compliance/Yearly	All Departments
	Management of preventing insider trading/Irregularly	Financial Division
Other Management Systems	Sustainable corporate management/Irregularly	The Sustainable Development Committee, Procurement Division, Human Resources and Administration Division

#### **TTY Environment: Audit of 4 Major Categories**

	Category	Regulation(s) Followed	
	Occupational Security	Regulation Governing Occupational Safety and Health	A grade-A occupation
	Fire Protection	Enforcement Rules of Fire Services Act	Regularly overhaul fire items; implement fire
	Air Pollution	Air Pollution Control Act	Regularly monitor fixe relevant standards.
	Sewage	Water Pollution Control Act	Regularly monitor the ensure that the efflue

In addition to explicitly incorporating relevant specifications into contracts or documents in accordance with regulations and management rules, the Company regularly conducts initiatives to promote regulatory compliance and provides corresponding education and training lectures to enhance employees' awareness. These efforts include education and training for new employees, programs related to the Taiwan Intellectual Property Management System (TIPS), practices for submitting pharmaceutical

#### Internal Audit and Internal Control Systems of TTY Legal and Compliance

	Category		
	Intellectual Property Protection	•	Perform internal control according to re Intellectual Property Management Syst Implement classified confidentiality and Specify the ownership of intellectual pro- intellectual property. Explicitly specify the ownership and co regarding patents/trademarks produce
	Pharmaceutical Advertisements and Marketing		Conduct internal control according to the Operating Procedure. For the pharmaceutical advertisements and an approval letter of the advertisements of the a
	Personal Data Protection	•	Clauses regarding personal data have l health examination and testing contract manufacturers do not use personal dat
	Ethical Management	•	Make notifications for the prevention of Establish a clause in contracts prohibiti

#### Handling Status

onal safety and health business officer has been appointed.

re safety equipment and complete the application of relevant overhaul extinguishing, notification, and shelter-seeking training.

ed emission sources and ensure the compliance of emissions with

e water quality of effluents generated from the manufacturing site and ents comply with discharge standards without the risk of pollution.

advertisements for review and audit, and courses focused on preventing infringements on ethical management principles. In 2023, the Company did not receive any correspondence from relevant competent authorities or other entities, nor did it receive reports from internal units regarding new violations of regulations pertaining to intellectual property rights such as the Patent Act and Trademark Act, as well as the Personal Data Protection Act, Criminal Code, and Securities and Exchange Act.

#### Handling Status

elevant corporate regulations including Regulation Governing tem and Documents and Regulation Governing Trade Secrets. d management of confidential documents.

roperty rights and restrictions on their use in contracts related to

onfidentiality standards in the recruitment and termination documents ed by employees during their tenure.

the Management of Pharmaceutical Advertisements and Standard

s determined per the process, a relevant checklist shall be filled out, ment shall be obtained from the competent authority in advance.

been included in contracts that involve personal data, e.g., annual cts, etc. signed with employees of the Company, to ensure that the ta without authorization.

f insider trading. ting unethical behavior.

## **Functional Committees**

To assist the board with supervision, TTY has established Remuneration, Audit, and Sustainable Development Committees. It has also established Sustainable Development and Ethical Management Promotion Centers, as well as a Risk Management Center that are subordinated to the Sustainable Development Committee.

#### The Remuneration Committee

To streamline the remuneration system for board members and managers and ensure the equity of performance and individual compensation relative to economic, environmental, and social factors. TTY has established the Remuneration Committee under the Board of Directors. Since 2016, the committee has comprised 3 independent directors and 1 external expert. All committee members fulfill their duties as responsible stewards and provide recommendations to the board to bolster the committee's independence. In 2023, 2 meetings were convened, with an average attendance rate of 100%.

The annual remuneration of board members includes director compensation and remuneration. The remuneration of senior managers includes a salary, bonus, and retirement allowance. The Remuneration Committee diligently reviews the remuneration system to ensure internal fairness within the Company. It takes into account industry payment standards, overall company performance, and the personal achievements of directors and managers in corporate governance and operational excellence. Additionally, the committee regularly provides recommendations to refine the remuneration structure and assists the Board of Directors in evaluating overall remuneration and welfare policies. This ensures that TTY's remuneration practices align with relevant laws and regulations while upholding principles of fairness. In the future, the Remuneration Committee aims to integrate board member remuneration with sustainable performance metrics, encompassing environmental stewardship, employee wellbeing, and social responsibility. This approach will embed the ethos of sustainable operations throughout TTY's leadership. starting from the directors themselves.

#### The Audit Committee

To strengthen supervision and reinforce management mechanisms, the board has established an Audit Committee

in accordance with the Securities Exchange Act. The Audit Committee consists of 3 independent directors with duties including financial statements, internal audits, internal control system, acquisition or disposal of assets, financial derivative transactions, fund lending to other parties, endorsements and guarantees, issuing securities, compliance with relevant laws, potential conflicts of interest among managers and directors, fraud investigations, risk management, employment, termination, and compensation of the CPA, and employment and termination of financing, accounting, and internal chief auditor staff. The attendance rate of all members of the Audit Committee in 2023 was 100%.

#### The Sustainable Development Committee

Following the Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies, TTY established a Sustainable Development Committee following the Principles of Corporate Social Responsibility Practice on October 7,2019 (renamed as the Principles of Sustainable Development Practice on December 24,2021). The Sustainable Development Committee is subordinated to the Board of Directors, and its duties include setting policies, goals, strategies, and execution plans relating to sustainable development from an environmental, social, and governance perspective, as well as conducting an annual review and revision of the implementation system and results for submission to the Board of Directors.

3 functional centers – the Sustainable Development Promotion Center, Ethical Management Promotion Center, and Risk Management Center – are subordinated to the Sustainable Development Committee to promote and implement the sustainable development strategic goals of the Company. The committee is supported by 1 executive secretary, fulfilled by the chief corporate governance officer, who manages committee meetings and tasks delegated by the Board of Directors.

# **GOVERNANCE PRINCIPLES**

TTY has integrated policies pertaining to the United Nations Global Compact (UNGC) and relevant regulations and best practice principles of TWSE/TPEx listed companies into its rules and regulations, including Principles of Corporate Governance, Principles of Procedures for Ethical Management, and Principles of Practice for Sustainable Development. These documents have been approved by the Board of Directors and subsequently implemented. For the comprehensive contents of these documents, please visit the official website .

## Promote Corporate Sustainability Development

The board of TTY has established a Sustainable Development Promotion Center under the Sustainable Development Committee that is responsible for the proposal and implementation of sustainable development policies, systems, relevant guidelines, and promotion plans. It submits such plans to the Sustainable Development Committee, which subsequently reports to the Board of Directors periodically. The CEO serves as the convener of the Sustainable Development Promotion Center, while the financial department is tasked with promoting relevant policies.

The Sustainable Development Promotion Center is divided into corporate governance, employee care, social participation, environmental sustainability, and product service sessions based on ESG. In addition, a stakeholder section has been



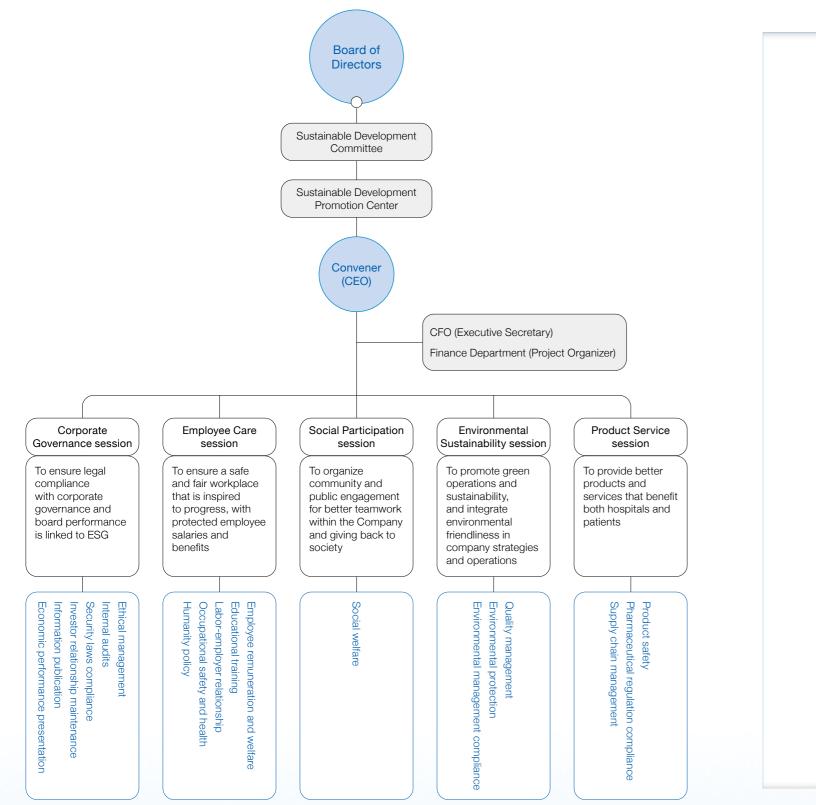
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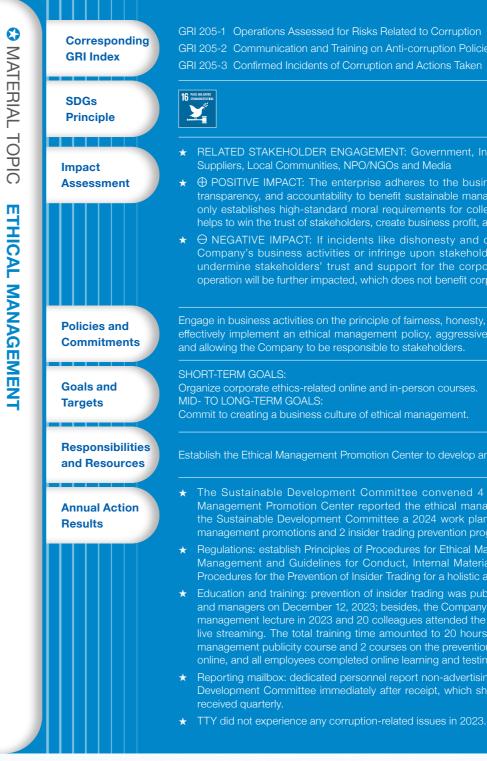
established in the "Sustainability" area on the Company's website and serves as a smooth and effective communication channel. The center also has internal meetings to confirm the requirements and expectations of stakeholders of the Company. Meanwhile, all sessions propose methods to improve ESG operations and advance future goals to promote the concept of business operations and social responsibility.

The Sustainable Development Promotion Center makes the implementation plan for the upcoming year by the end of the current year and submits the plan to the Sustainable Development Committee and Board of Directors. The work plan for 2024 was submitted to the Sustainable Development Committee for implementation upon approval on November 3, 2023.





Ethical Management



GRI 205-2 Communication and Training on Anti-corruption Policies and Procedures

★ RELATED STAKEHOLDER ENGAGEMENT: Government, Investors, Customers, Employees,

 $\star~\oplus$  POSITIVE IMPACT: The enterprise adheres to the business concept of ethics, integrity, transparency, and accountability to benefit sustainable management. Ethical management not only establishes high-standard moral requirements for colleagues in the corporate, but also helps to win the trust of stakeholders, create business profit, and improve corporate value.

Company's business activities or infringe upon stakeholders' interests and consequently operation will be further impacted, which does not benefit corporate sustainability.

Engage in business activities on the principle of fairness, honesty, good faith, and transparency, and effectively implement an ethical management policy, aggressively preventing dishonest behavior,

Establish the Ethical Management Promotion Center to develop an ethical management system.

★ The Sustainable Development Committee convened 4 meetings in 2023. The Ethical management promotions and 2 insider trading prevention programs

★ Regulations: establish Principles of Procedures for Ethical Management, Procedures for Ethical Procedures for the Prevention of Insider Trading for a holistic anti-corruption system.

★ Education and training: prevention of insider trading was publicized and instructed to directors management lecture in 2023 and 20 colleagues attended the lecture on-site and through online live streaming. The total training time amounted to 20 hours; furthermore, 1 corporate ethical management publicity course and 2 courses on the prevention of insider trading were convened online, and all employees completed online learning and testing.

Development Committee immediately after receipt, which shall then report a summary of mail

#### Principles of Procedures for Ethical Management

To prevent dishonest behavior, TTY has established an Ethical Management Promotion Center subordinated to the Sustainable Development Committee, with the CEO as the convener. This center comprises a Report and Process Team, as well as an Administration Team. All senior management staff are required to declare compliance with ethical management practices, with both the CEO and Vice President signing an ethical conduct statement. The Ethical Management Promotion Center establishes ethical management as a business culture, drafts the Principles of Procedures for Ethical Management. the Procedures for Ethical Management and Guidelines for Conduct, and Operating Procedures for Handling Internal Material Information and Insider Trading Prevention as the key regulations of ethical management and systems to process case reports and ensure employees do not engage in improper interests or corruptive practices. Currently, all the Company's sites in operation received evaluation management regarding ethical risk items to ensure that no corruption or fraud occurs.

#### Ethical Management Education and Training

To ensure comprehensive awareness of ethical management regulations, TTY actively disseminates relevant policies to all new employees. This includes providing each newly recruited employee with an integrity policy program and circulating announcements regarding the Procedures for Ethical Management and Guidelines for Conduct via the intranet and email to all employees. To facilitate immediate compliance with company regulations, TTY organizes a series of online and inperson orientation courses for new employees. These courses cover various topics, including an Introduction to Intellectual Property Rights and Environmental, Safety, and Health, among others. In 2023, 97 participants attended in-person courses, accumulating a total of 146 training hours.

In terms of communicating anti-corruption policies and procedures to members of the governance unit, TTY ensures that directors, managers, and employees receive training on laws and regulations related to the prevention of insider trading at least once annually. Additionally, the operating results of these efforts are reported regularly to the Sustainable Development Committee and the Board of Directors each year. The Company publicized the prevention of insider training to directors and managers on December 12, 2023; meanwhile, the operation status of annual ethical management education and training as well as whistleblowing of unethical behaviors in 2023 was reported to the Sustainable Development Committee and the Board of Directors on March 8, 2024.

To advance employee development, TTY organizes ad hoc training courses on a variety of subjects. The 2023 online courses included Drug Safety Supervision, Introduction to Good Drug Practice (GDP) Management, Information Security, and Introduction to Trade Secrets, Corporate Ethical Management, Insider Trading Prevention, and Material Business Event Handling Principles, all of which were compulsory. All employees completed the online courses.

#### **Regulatory Compliance**

To ensure the compliance of its operating activities with the laws and regulations of the local government, TTY pays close attention to the formulation and latest corrections of regulations that may impact the Company. It provides suggestions on regulatory compliance to each department or all employees for reference, to ensure that the practical operations of each unit conform to the specifications required.

Each unit reviews regulatory compliance annually. We also disclose major penalty cases (Note) or major incidents that seriously affect the corporate operation in the sustainability report, to follow company principles of transparency, and the requirements of GRI standards for balanced reporting. In 2023, the Company didn't receive any penalties for any violations of the laws and regulations, and no corruption-related situations occurred in the Company. There was a reported incident involving the former TTY CEO regarding a price difference in medicants. He allegedly paid bail of NT\$ 4 million due to his personal behavior, but not the company; as a result, he has already resigned. TTV has actively coordinated with the district prosecutor's office to investigate the case, by the end of 2023, the case was still being investigated. The Company will actively strengthen internal publicity to avoid the reoccurrence of similar situations.

Note: A material penalty refers to a fine per single violation of over NTD\$ 1 million.

#### **TTY Anti-corruption Training Status of Year 2023**

Employee Category	Total Employees	Actual Participants	Percentage
Administration	98	98	100%
Marketing & Sales	123	123	100%
Research	36	36	100%
Factory	243	243	100%
Total	500	500	100%

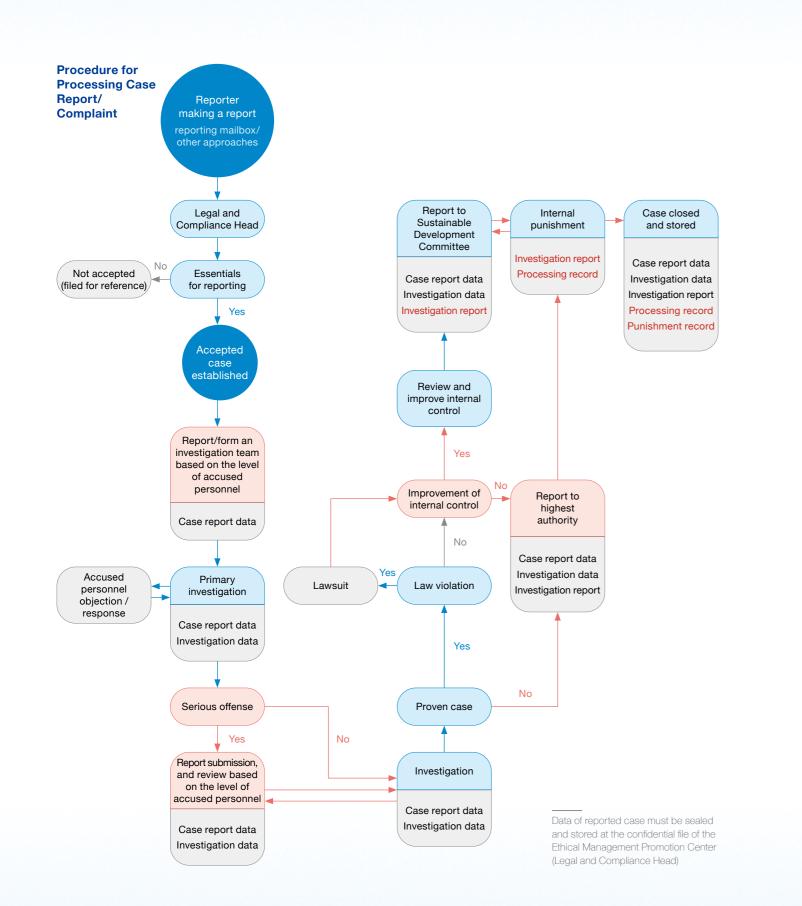


#### **Complaints and Suggestions Channel**

Corporate sustainable operations are based on honesty and responsible business actions. Because of this, we adopt various approaches for reporting cases and suggestions and encourage stakeholders to report, complain, or make suggestions regarding any unethical behavior or dishonest operations that impact the environment, economy, society, and human rights.

An attempt to reduce dishonest behavior has seen the use of the complaint and report system and its processes. There is a mailbox for reporting such behavior on TTY's website and the employee intranet: ethical@tty.com.tw . Stakeholder feedback is processed by the Ethical Management Promotion Center. All cases received are gathered, listed, and submitted to the Sustainable Development Committee every guarter. Upon receiving a case, an investigation is initiated. Management of different departments will form an investigation team according to the accused personnel's position. All violations will be punished, and the persons culpable suspended or their employment terminated. The reporter's identity and report content remain confidential to protect personal safety. A report may be made anonymously, and anyone who reveals the reporter's identity or report content will be severely punished. The audit office examines the mailbox each year to ensure no reports have been hidden.

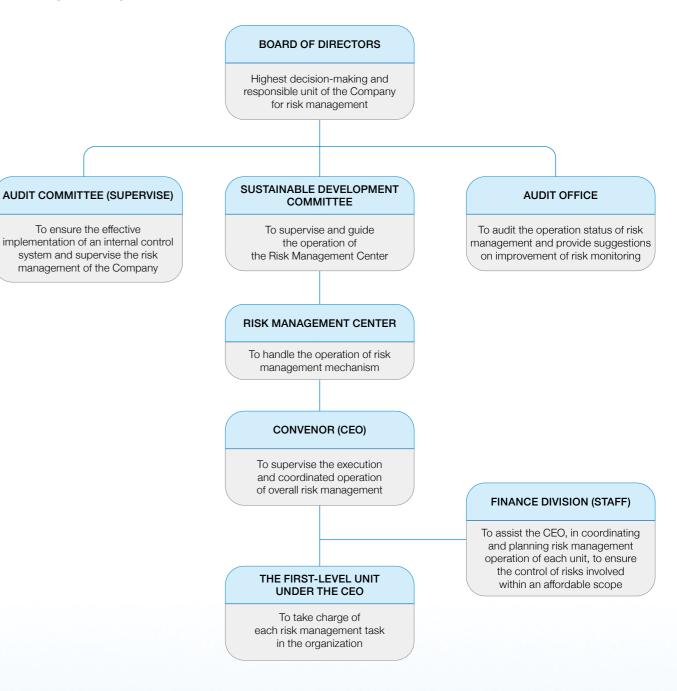
Anyone can report illegal activity to ethical@tty.com.tw . The information required for a case report is available on the Company website. In 2023, the Company obtained an unnamed report (other than a corruption incident) through the whistleblowing channel. Currently, the relevant internal investigation has already been closed, and the relevant operating process has been improved.



# RISK MANAGEMENT

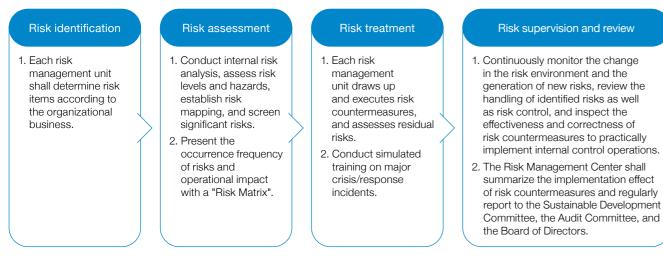
To conduct risk management of uncertain factors potentially threatening the corporate management of the Company, and to progress towards the goal of achieving corporate sustainable development with stable business operations, the Company passed the Risk Management Policy and Procedure through the Board of Directors on December 28, 2020. It specifies that various risks shall be defined in the Company's "Risk Management Policy", according to the overall operating guidelines and strategies, and a management mechanism intended to identify, assess, and process risks, and implement effective supervision and review, to avoid or decrease the impact of risk incidents on the corporate operation and ensure corporate sustainable development.

#### **Risk Management Organization**



## Ethical Management

#### **TTY's Risk Management Policy and Procedure**



TTY's Risk Management Policy and Procedure v.2 (amended on December 23, 2022)

#### Identification and Management of Significant Risks

TTY manages potential risks that may impact its operations using a rigorous and practical attitude and conducts risk assessment per the materiality principle. The Company regularly reviews the risk changes and identifies and assesses significant risks of the next year at the end of each year. The risk management units should identify the risk items in four categories, strategy, operations, finance, and others, for 2024 at the end of 2023, and produce a risk matrix based on the risk determination criteria established. During the assessment, risks, opportunities, and impacts introduced because of climate change to each aspect have been considered, and

a specific chapter has been established to present relevant reported contents. See the chapter of "Responses to Climate Change" for details.

In accordance with the assessment conducted by the risk management units, a total of 4 risk items were categorized as high risk. The responsible units should draw up and execute relevant plans to address these risks, and management should practically supervise and guide the implementation of such plans; as for medium risks, the scope of responsibility should be established for supervision and management; low risks might be tolerated per the current business operation.

Risk Matrix Diagram		• Low risk	Medium risk     High risk
High • Information security • Financial management	<ul> <li>Image and reputation</li> </ul>		
Probability of occur	<ul> <li>Development of new products or new markets</li> <li>Occupational safety and health</li> <li>Policies and regulations</li> </ul>	<ul><li>Product safety</li><li>Supply chain</li><li>Human resources</li><li>Geopolitics</li></ul>	<ul> <li>Market competition</li> <li>Integrity and ethics</li> <li>Products and technology development</li> </ul>
• Credit			<ul> <li>Production efficiency</li> <li>Disasters</li> <li>Energy crisis</li> </ul>
LOW	Degree of im		right

Degree of impact

## Major Risk Items and Countermeasures

#### 2023 TTY Major Risk Items and Countermeasures

Risk Item	Risks Explanation	Risk Management Strategies	The Authorities
Competition	The newly mechanism- transferred pharmaceuticals launched or the price competition of generic drugs may impact or cause a risk of loss to the corporate operation or investment.	<ul> <li>Pay continual attention to the market development, and seek new pharmaceuticals.</li> <li>Strengthen relationships with clinical experts and customers and discuss opportunities for prescription and therapeutic schedules that may be combined with new pharmaceuticals. At the same time, assist physicians in completing academic trial protocols to increase the academic data regarding the value of product prescriptions.</li> <li>Strengthen communication with customers regarding differences in DMF of manufacturer specifications and ingredients of pharmaceuticals, and propose examples indicating the Company's support for clinical studies, to lower the risks.</li> </ul>	Oncology (TOT)
Products and technology development	The R&D of products or technology (including product improvement and post-marketing clinical study) fails entirely or partly due to insurmountable difficulties, thus resulting in financial losses and affecting corporate development.	<ul> <li>Strengthen the monitoring and assessment management of project development, and adjust the direction or resource allocation of the projects as necessary.</li> <li>Improve user participation and acquire feedback from users, to ensure that product development complies with actual market demand.</li> <li>Make good use of agile development methods, and break down large projects into smaller and iterative components, to quickly adapt to changes, reduce losses resulting from market changes, and lower the technical threshold of development.</li> <li>Seek technical cooperation and authorization, to spread the risks and acquire the counterparties' technical support.</li> </ul>	Pharmaceutical Development Center
Image and reputation	Risk that harms the image or reputation of the Company due to factors like litigation and violation of regulations.	<ul> <li>Improve the efficiency of the notification process in the organization, establish a single-issue communication window, and notify within a certain time limit after the occurrence of a relevant incident.</li> <li>Improve the strength of media management, and communicate with the media with a time limit for balanced reporting.</li> </ul>	Public Affairs
Integrity and ethics	Corruption, fraud, and personal ethical defects.	<ul> <li>Require the application of marketing activities in advance, and check the contents and expenses of marketing activities every quarter.</li> <li>Conduct a general survey of relations of employees with customers and vendors every year, and evaluate conflicts of interest/necessity for recusal.</li> </ul>	Legal and Compliance

Note: For detailed risk management information, please refer to the official website.

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## Information Security Risks

#### Information Security Risk Management Framework

To ensure comprehensive information security management across all assets, TTY employs 1 information officer along with other skilled personnel. Their duties include establishing internal security policies, planning and executing security protocols, and periodically reporting on information governance to the Board of Directors. Oversight of information security falls under the purview of the audit office, led by the audit officer and supported by professional audit personnel. Should any discrepancies arise, the audit office prompts audited units to propose improvement plans and actions, monitoring implementation periodically to mitigate the risk of internal breaches. TTY received no complaints regarding infringements on customer privacy or loss of customer information in 2023.

## Information Security Risks Assessment and Management

TTY identifies various risks and implements appropriate control measures through due diligence, risk assessment, and steps to reduce potential threats to information security. The Risk Assessment and Handling Procedures were established to keep information assets and network security within the scope of the information security management system. TTY executes system risk evaluations at least once every year to detect potential issues early, implement corresponding actions, and submit an annual information security report to the Board of Directors.

#### Internal and External Information Security Audit

To reinforce secret data management, TTY implements internal and external information security audits periodically:

#### Internal audit

In addition to a daily information security control audit, the audit office also executes an annual audit covering information security items based on the Regulations Governing the Establishment of Internal Control Systems by Public Companies. TIPS Management assigns a principal auditor and teams up members who pass audit training every year. A TIPS-aligned audit is run across all units regarding the management of document confidentiality. Management representatives then meet to discuss shortcomings and improvements.

#### External audit

The Institute for the Information Industry is designated to conduct an audit of TTY's intellectual property management regulations every 2 years to ensure TTY's operational procedure is satisfactory to the TIPS.

An external consulting company is designated to conduct an inventory of trade secrets and optimize the internal management system to ensure TTY's information security management is satisfactory to industrial standards and there are no security concerns.

#### Information Security Protection Measures

Enterprises worldwide face ongoing threats from hackers who employ various intrusion techniques, notably leveraging AI technology for intelligent attacks. In response, organizations must implement targeted preventive measures and tools. TTY has adapted its information security protection strategies to address this evolving threat landscape. We will conduct overall planning in the following key directions, and the implementation thereof is described as follows:

#### 1. Computer room equipment security:

To reinforce access security, we have applied HCl and industrial file server solutions to data centers and file servers to cope with increasing business demand in a more timely and flexible manner, with a comprehensive backup solution.

#### 2. External connection access:

To eliminate potential attacks on login information when accessing servers on a VPN, and to increase connection safety, multi-factor authentication is activated.

#### 3. Internal network control:

According to a security report of domestic information security institutions, 80% of invasions and threats originate from improper use of the intranet. TTY has introduced its renowned intranet security monitoring product that effectively screens the terminal connected to the intranet to avoid viruses and ensure Company network security.

#### 4. Professional information security checks:

In addition to system updates to cover system loophole attacks, we run scans on critical servers to spot and fix weak points, minimizing potential attacks. Additionally, the Company seeks assistance from external information security companies to test its risk exposure, and measure its cybersecurity protection rating against industry peers for effective improvement.

#### 5. Protection drills:

TTY runs drills to become familiar with local and remote backup processes every year. The auto-backup and restoration system ensures the system resumes smooth operations postthreat.

#### 6. Information security awareness:

The Company executes social engineering drills to improve employees' ability to adopt the correct methods to dispose of letters received from unknown sources. The overall email opening rate was 63.25%, and the opening rate of links and attachments was 39.85% respectively, both better than the average values in the industry. Online information security training courses and after-class tests are provided for colleagues failing to meet the required standards, so that personnel can receive new information on information security and improve their risk awareness.

In addition to the above-mentioned management to ensure information security, we assess the possibility plan to apply ISO 27001. Through this strict system, the operations and procedures can be perfected and the certification allows our compliance with international regulations.

#### **IP** Management

#### **TIPS Grade A Certified**

To protect the Company's IP from infringing others, and further expand the Company's intangible assets, TTY has implemented the TIPS (Taiwan Intellectual Property Management System) to improve the IP management system and confidentiality and minimize risks. We also target continuous improvement, risk control, and response-ability by conducting annual internal audits and trade secret incident drills. To prevent patent infringement, we work to ensure no such incidents in target markets impact our key products. For development management, we run prior patent searches before developing products and novel technology to ensure minimal infringement and maximum efficiency.

We included TIPS 2007 and passed the basic certification in 2016. As the updated version of 2016 prevails, in 2017 we reviewed the internal system to align our processes. In 2018, we earned an independent TIPS audit Grade A certification; 2 years later in 2020, TTY received another certification to extend the validity of our Grade A TIPS 2016.

In 2020, TTY implemented a trade secret management system and established written procedures to effectively maintain the confidentiality, integrity, and availability of trade secrets. By August 2022, an industrial DMS (document management system) was put in place to minimize the manual effort required to manage trade secrets, reducing human error and disclosure risks and improving the safety and security of trade secrets. The 2022 independent TIPS audit reviewed our trade secret management approach and approved our procedure, demonstrating our conformity to regulations. The certificate is valid until December 31, 2024.



# **ENVIRONMENTAL**

- connection standards.
- connection standards.
- requirements.

- 14.84 tons.

- Environmental Symbiosis
- Responses to Climate Change
- Energy Management
- Air Pollutant Control
- Water Resources Management
- Waste Management
- Toxic Substance Management

## Key Performance

★ The Lioudu and Chungli factories saved 339,488,86 kWh of electricity and 168.05 ton $CO_2e$  via **11** electricity-saving measures.

★ The chemical oxygen demand (COD) emissions in the water of the Lioudu and Chungli factories was 8.50 times lower than sewer

★ The quantity of suspended solids (SS) discharged in the water of the Lioudu and Chungli factories was **25.85** times lower than sewer

★ The concentrations of air pollutants emitted by the Lioudu and Chungli factories meet the standards and are better than the legal

★ The Chungli and Lioudu factories achieved **100%** in weekly and monthly waste clearance contractor follow-up audits.

★ The total waste of TTY was about 43.27 tons, a significant decrease by **13%** in total waste compared to the previous year.

 $\star$  Achieved a **30%** reduction in the total amount of hazardous waste to 28.43 tons while the total amount of non-hazardous waste was

## **ENVIRONMENTAL SYMBIOSIS**

## Management Guidelines

As a pharmaceutical company enhancing the quality of human lives, TTY is aware that people's health greatly relies on a good environment, including clean air, water, and proper handling of waste. Therefore, TTY holds environmental sustainability as the first priority in all operations as the guideline for environmental protection management. All suppliers are requested to follow TTY's supplier management policies and continuously optimize processes to save energy and reduce the impact of operations on climate change.

Greenhouse gases are the main driver of global warming and climate change. TTY introduced the ISO 14064-1 GHG inventory inspection and verification in 2022, and aims to pass the certification on 10/5/2023 and obtain the certificate on 7/6/2023. We will continue to inspect the corporation's greenhouse gas emissions in accordance with the ISO 14064-1 inventory standard every year, which will form the basis of our management guidelines and regulations for all energy-saving and carbon reduction measures to improve energy efficiency across all operation locations.

## **Environmental Goals**

In compliance with the relevant environmental law and international guidelines, TTY takes the initiative when it comes to environmental conservation and considers all possibilities to minimize the ecological impact of its manufacturing processes.

In 2023, no significant fines due to violations of related laws were imposed\*. All activities, business operations, and internal management of all TTY locations and sites are conducted with sustainable environmental goals in mind. TTY is evaluating whether to establish a dedicated environmental management department and assign dedicated personnel to formulate, promote, and maintain relevant environmental management systems and specific action plans, such as proper water consumption, recycling, and related measures, to enhance water usage efficiency. Meanwhile, the impact of climate change of operational activities, policies, and strategies are being monitored and promoted to decrease carbon footprint and GHG emissions. Periodical environmental education for all employees focuses on being a sustainable consumer and aims to achieve the 5 goals of building a good corporation that is friendly to the environment.



Note: A material penalty refers to a fine per single violation of over NTD\$1 million

## **RESPONSES TO CLIMATE CHANGE**

TTY has identified the risks and opportunities associated with climate change in response to increasing awareness of global warming, extreme climate change, environmental protection, safety and health, and conservation. Based on the results, the company has planned specific response strategies to address climate-related financial disclosures. The report includes recommendations for the Task Force Climate-Related Financial Disclosures (TCFD) and supporting information on climaterelated risks

The material impacts that TTY may face in the future include those related to energy, environment, safety, health issues, and external constraints such as policies and regulations. Issues such as low-carbon energy, low-carbon electricity, and carbon footprint will become important and require urgent attention

## The Four Pillars of the TCFD Framework

The Board of Directors serves as the highest supervisory unit in charge of approving the risk management policy, supervising and managing TTY's decision-making processes, and evaluating and monitoring climate change related matters.

The Risk Management Center is a dedicated unit for climate change management. The center reports progress of the climate change response plan to the Sustainable Development Committee and the Board of Directors in accordance with the "Climate Governance" material principles established by the Risk Management Center annually.

In addition, it manages climate change related training to enhance awareness at governance level.

> **Metrics and** Targets

#### Short-term Goals

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2% of power conserved as a result of the implementation of an energy-saving plan. The plan was made in 2023 and is focused on improving energyconsuming equipment. Introduced ISO 14064-1 GHG inventory standards and completed certification in 2024. Continue to carry out risk management and response measures for potential risks due to climate change, and implement risk identification and assessment operations in

#### **Mid-term Goals**

2024

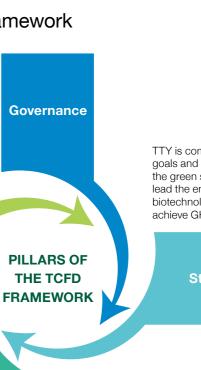
Gradually increase carbon emission reduction targets. Long-term Goals

8% or more carbon reduction by 2030 compared to base year 2022.

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in company operations. To address these material impacts, TTY plans to make organizational adjustments and formulate response strategies. The company has also strengthened strategic cooperation with domestic and foreign peers, green energy industries, suppliers, and academic research circles to reduce operational risks and create more favorable operating conditions.

In addition to cooperating with national policies and greenhouse gas reduction promotion plans, TTY will take relevant action and establish a team to strengthen the planning and promotion of energy conservation and carbon reduction work. The company will also evaluate the switch to or replacement of low-carbon, high-efficiency equipment to reduce environmental pollution caused by business operations.



TTY is committed to fulfilling low carbon goals and green processes, and promoting the green supply chain. It is expected to lead the environmental transformation in the biotechnological pharmaceutical industry and achieve GHG gas reduction goals.

Strategy

Risk Management

The Risk Management Center convenes sessions to identify risks and opportunities related to climate change and establishes management plans for major risks/ opportunities to trace progress and results, and achieve environmental goals.

## Climate Scenario Analysis

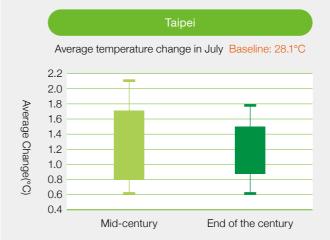
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- In response to the FSC's TCFD framework requirements, the scenario is based on IPCC 5th RCP (Representative Concentration Pathways) and RCP2.6 scenarios, which resulted in an increase of 2°C.
- The weather scenario takes into account locations in Taiwan

   the headquarters, Chungli Factory, Lioudu Factory, Neihu
   Factory, and Pharmaceutical Development Center.
- 3. The base period of the weather scenario is set as 1976~2005; estimations are set in the mid-21st century.

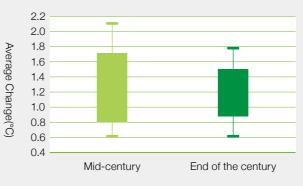
- 4. The simulation of the scenario adopts the following indexes:
  - a. Temperature: The maximum monthly average temperature (TG-mon), and the number of days where the daily maximum temperature exceeds the 90th percentile of the maximum temperature (TX90p).
  - b. Heavy Rain Days (R200): Highest volume of precipitation on a single day (RX1DAY), and number of days with rainfall of over 200mm per year (R200).
  - c. Rise of sea levels: When the temperature rises 2°C, the sea level of Taiwan rises 0.5 m.
- Source: The Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP), the National Science and Technology Center for Disaster Reduction (NCDR), and the Coastal Risk Screening Tool: Ice Sheet Contributions to Sea Level Rises.

#### **TG-MON (JULY)**

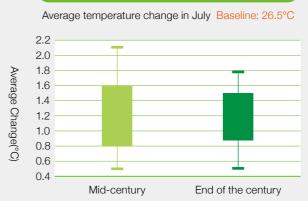








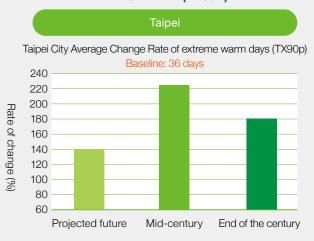






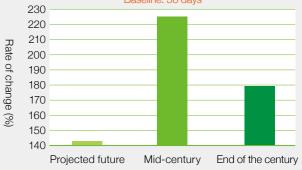
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### PERCENTAGE OF DAYS WHEN TX > 90TH PERCENTILE (TX90P)



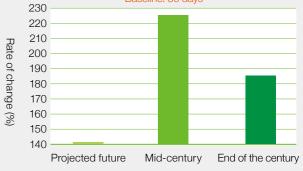
Keelung

Keelung City Average Change Rate of extreme warm days (TX90p) Baseline: 36 days

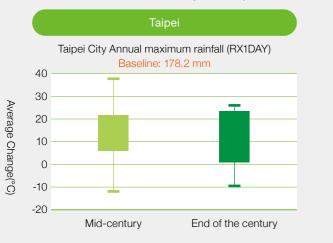


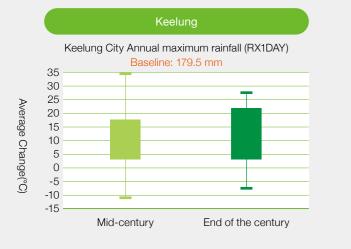
Taoyuar

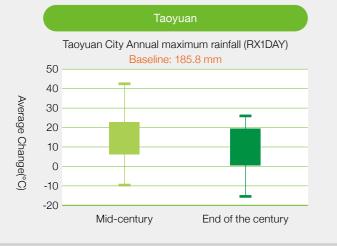


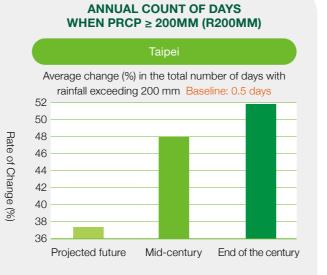


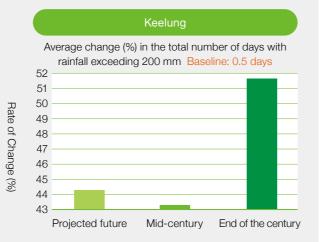
#### **HIGHEST VOLUME OF PRECIPITATION** ON A SINGLE DAY (RX1DAY)

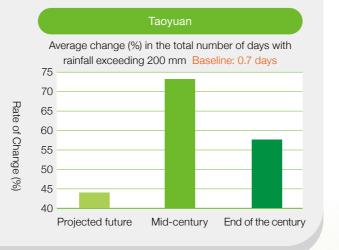


















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## FLOOD POTENTIAL WHEN OVER 200MM OF RAIN FALLS IN 24 HRS

















## Climate-related Risks, Opportunities, and Financial Impacts

#### 2023 Identification and Response Measures of Climate-related Financial Risks

	Risk Category	Risk Impact	Countermeasures and Potential Financial Impact
		The Greenhouse Gas Reduction and Management Act is becoming stricter. If GHG emission control is launched in the future, carbon prices will increase the operational costs of the Company.	To improve energy efficiency, TTY will continuously implement its energy-saving and carbon-reduction plan and install energy-saving facilities. TTY will also continually improve and reinforce processes to reduce the environmental impact via source controls and terminal prevention equipment.
	Policy and Laws		According to data from PTC, if nuclear power is replaced by renewable energy and coal is replaced by gas in the future, power generation costs per degree will increase by 45.45% in 2025. Taking the average power price of NTD\$2.6 per degree in 2018, power generation costs per degree will increase by NTD\$1.182 by 2025.
			Based on the 15 million kWh of power outsourced over the past 2 years, an annual increase of NTD\$17.73 million in power costs is expected.
		The economic system is gradually turning to supporting low-carbon, high-efficiency technology improvement and innovation, which may affect the competitiveness of the Company	Evaluate the comprehensive impact of climate change related policies to make short- to mid-term operational plans with the objective to reduce carbon emission during the production process and promote green transformation
Transformation Risk	Technological Risks	and likely increase procurement, production, and distribution costs to meet the demand and depth required by customers.	<ol> <li>The energy-saving measures implemented in 2023 include changing fans and motors of cooling towers for the A/C system, installing a cooling tower water quality monitor system, improving A/C system performance, replacing vacuum cleaners and pipes to reduce power consumption, and replacing traditional T8 lighting with LED lighting. The total expenditure of the above measures was around NTD\$8.98 million in 2023.</li> </ol>
Risk			2. Continue to implement various energy-saving measures including renewing the cooling system for the A/C, implementing a cooling water quality monitor system, and replacing traditional T8 lighting with LED lighting. The estimated expenditure of above measures is aroun NTD\$12.79 million.
	Market Risks	To correspond with climate change risk and carbon emission control requirements, new business models have gradually been created and enterprises are required to create carbon assets management capabilities to adapt to this trend. The inventory costs of TTY increased to avoid the risk of supply chain disruption due to the unstable supply of raw materials.	To enhance the ability to assume climate change risk, TTY has created new revenue opportunities and market expansion through the establishment of environmental protection related mechanisms and carbon emission control measures. Meanwhile, inventory costs will increase along with the increase of safe inventory levels. With inventory of about NTD\$1.062 billion in 2023, NTD\$10.62 million in inventory costs are expected; an additional 1%.
	Reputation Risks	Climate change may affect the image that customers and social groups have in terms of how committed the Company is to the low-carbon transformation. If the Company produces high carbon emissions or high levels of pollution, it may not win tenders, but instead lose orders, experience a decrease in revenue, or even suffer reputational damage.	To develop more environmentally friendly products and services, TTY is not only continuously improving sewage and waste recycling rates, but managing environmental sustainability activities to build a green enterprise culture from the inside out, and evaluating its investment in green energy and low carbon logistics development to reduce the carbon footprint of Company products, and enhance industrial competitiveness in line with market demand.

Risk Category	Risk Impact	Countermeasures and Potential Financial Impact
Acute Risk	Climate change may cause a typhoon, flood, draught, or other extreme climate event, resulting in damage to assets, supply chain disruption, and other events with an acute financial impact.	Reinforce water resources management and ensure the safety of plant equipment to maintain uninterrupted operations. In response to draughts in Taiwan, TTY has a list of water suppliers but costs have increased. With 116,987 degrees of water consumption in 2023, the cost of water outsourcing calculated at the Lioudu Factory is NTD\$160,000/day (25t water tanks for 8 rounds) to cover water shortages. The cost of water outsourcing calculated at the Chungli Factory is NTD\$80,000/day (25t water tanks for 4 rounds) to cover water shortages.
		Please refer to Chapter 5 Water Resources Management for more information.
		Revenue will also be affected if materials and finished products cannot be delivered on time due to typhoons and floods. To mitigate the risk, warehouse leases in different locations will be evaluated and rent will be increased by about NTD\$20 million.
Chronic Risk	Rising temperatures around the world and the gradual shortage of water, electricity, and fuel resources may disrupt factory operations, resulting in rising operational costs or penalties due to delivery delays.	Evaluate the use of regional energy and resources consumption and arrange off-peak production as needed. Prepare a BCP to actively find new suppliers and create a list of emergency power generators and water suppliers to ensure stable materials and energy resources supplies, and enhance the ability of TTY to respond and adapt to disasters accordingly.

### TTY 2023 Climate Change-Related Opportunities and Countermeasures

Type of Opportunity	Opportunity Explanation	Countermeasures and Potential Financial Impact		
Resource Efficiency	Increase energy efficiency to reduce mid- to long-term operational costs and achieve carbon reduction goals.	The use and upgrade of equipment with lower energy consumption, water, and power reduction goals, aimed at better efficiency, continued in 2023 at an expense of NTD\$8.98 million. Such measures are expected to save NTD\$ 960,000 per year. The renewal of outdated machines in 2024 is allocated a budget of NTD\$12.79 million, contributing to a cost reduction of NTD\$1.41 million per year.		
Resilience	Improve the ability to adapt to climate change by managing climate change-related risks and seizing opportunities.	The Risk Management Center convenes all sessions to identify climate change-related risks and opportunities and to plan management strategies. The Finance Division establishes "Climate Governance" material principles to trace progress and effects, and to reinforce the risk response ability of the Company.		

### Matrix of Climate-related Risk and Opportunities



Very Unlikely (Low)

### List of Climate-related Risks and Opportunities

#### **Climate Risks**

- 1 Renewable energy and carbon reduction regulations and requirements
- **2** Cost of the low-carbon transformation
- 3 Rise of operating cost
- 4 Climate abnormalities (typhoon)
- **(5)** Climate abnormalities (flood)
- 6 Climate abnormalities (rise of sea level)
- Olimate abnormalities (rise of average yearly temperature)
- 8 Cost to build corporate resilience
- Cost to develop low-carbon technology and services

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Likely (Medium)

Very Likely (High)

### **Climate Opportunities**

- 1 Better energy efficiency
- **2** Better resource efficiency

#### **TTY's Climate-related Risks' Financial Impact**

Climate Risks	Probability of Occurrence	Impact Level	Risks Explanation	Response Strategies and Financial Impact	Department in Charge	Climate Risks	Probability of Occurrence	Impact Level	Risks Explanation
Regulatory requirements related to renewable energy and carbon	HighMediumOperating costs increased due to greenhouse gas verification work in response to regulatory requirementsThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ 514,500.HighMediumThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ 514,500.HighMediumThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ 514,500.HighMediumTereponse requirementsThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ 514,500.HighMediumTereponse requirementsThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ 514,500.HighMediumTereponse requirementsThe cost of inventory and third-party verification of greenhouse gas emissions annually executed reached approximately NT\$ solutions.		Lioudu Factory Engineering, and Chungli Factory Engineering	Typhoon	High	Medium	Loss of labor due to the inability to work, loss of daily revenue, and loss of machines and equipment		
Cost of low-carbon	High	High	The additional measures related to the government's net- zero policies led to an increase in additional costs	A total investment of NTD\$14,425,630 had been made in energy-saving plans for the Lioudu and Chungli factories over the past 5 years. The cost of installing a solar energy system at the Chungli factory is estimated to be NTD\$8.9 million (146KW capacity, NTD\$60,700 cost per 1KW, totaling NTD\$8,862,200). For the Lioudu factory solar energy system, the cost is NTD\$19.05 million (313.92KW capacity, NTD\$60,700 cost per 1KW, totaling NTD\$19,054,944).	Lioudu Factory Engineering, and Chungli Factory Engineering	Rise of yearly average temperature	High	High	Increasing material costs
B Rise of operating cost	High	High	Natural gas instead of heavy oil	Natural gas replaced heavy oil and change of fuel boilers at the Lioudu and Chungli factories. In Chungli, the cost to change the boiler was NTD\$5,225,187 (saving up to 78,840 KW yearly, or NTD\$236,520 on the power bill), while in Lioudu, the cost to change the boiler was NTD\$6,980,000. (saving up to 65,185 KW yearly, or NTD\$195,555 on the power bill).	Lioudu Factory Engineering, and Chungli Factory Engineering	Cost to build o	High	insura expen mainta	Additional insurance expenses to maintain business continuity
	High	High	Unstable key- materials supply	Due to the environmental protection policies of the source countries, the raw materials from natural resources have a supply period of over 4 months, which also incurs inventory costs of NTD\$ 600,000.	Procurement Division	uild corporate resilience	High	High	Generators and UPS are installed to ensure business continuity

aily costs incurred from loss of material and labor e to typhoon-caused power and water outage, as ell as a one-day production suspension:

Material loss: NTD\$5 million for the Chungli factory and NTD\$7.83 million for the Lioudu factory This includes loss of injection and oral medicine, as well as OEM materials.

Labor loss: NTD\$1.136 million in daily labor costs (monthly salary of 507 employees of NTD\$34,090,195÷30 days = NTD\$1,136,340/day.

Cost of water outage: Production during water outage requires NTD\$30,000 for water storage equipment; NTD\$80,000 per day for the Chungli factory and NTD\$160,000 per day for the Lioudu factory in purchased water costs.

ue to the economic inflation rate of raw materialoducing countries not being fully controlled and normal climates leading to accelerated energy onsumption, suppliers' production costs remain gh, resulting in a 0.6% increase in key-material ocurement costs in 2023.

ue to the increasing costs of Business Interruption surance and other climate hazard insurance, the tal insurance expenses for all 3 factories amount to TD\$1,036,000.

2023, the insurance coverage for Chungli, oudu, and Neihu factories is NTD\$1,829,642,940, TD\$365,700,969, and NTD\$80,273,456 respectively, th insurance fees for each being NTD\$859,932, TD\$166,028, and NTD\$10,436.

Annual maintenance fees for the generators at the Chungli factory and the Lioudu factory are NTD\$51,000 and NTD\$110,000 respectively.

Diesel fuel expenses for the generators at the Chungli factory and Lioudu factory are NTD\$58,500 and NTD\$13,500 respectively (calculated with NTD\$30/L).

Lioudu Factory Engineering, and Chungli Factory Engineering

Departmen in Charge

Human Resource & Administrative Division, Production Planning Division

Procurement Division

Human Resource & Administrative Division

#### **TTY's Climate-related Opportunities' Financial Impact**

Climate-related Opportunities	Probability of Occurrence	Impact Level	Opportunity Explanation	Response Strategies and Financial Impact	Department in Charge
<ul> <li>Better energy efficiency</li> </ul>	High	Low	Energy efficiency plans	Over the past 5 years, the plans have invested NTD\$14,425,630 at the Lioudu and Chungli factories, resulting in a conservation of 892,513 KW and savings of NTD\$2,972,239 on power bills.	Lioudu Factory Engineering, and Chungli Factory Engineering
Bette	High High		Water usage reduction	At the Chungli factory, RO sewage is treated daily, and a cooling tower is utilized. With the RO recycling 2t/hr, and water being charged at NTD\$12 per cubic meter, we save NTD\$210,240 annually by recycling 48t of sewage capacity daily. At the Lioudu factory, RO sewage is treated as equipment cooling water and used in a water seal vacuum pump. With a recycling rate of 0.75t/hr and each cubic meter of water charged at NTD\$12, we save up to NTD\$78,840 annually by recycling 18t of sewage daily.	Lioudu Factory Engineering, and Chungli Factory Engineering
r resource efficiency	Paper, waste recycle High High	waste recycle	Income from recycling generates NTD\$4,000 per month, or NTD\$48,000 per year.	Lioudu Factory Engineering, and Chungli Factory Engineering	
	High	High	Use of ERP	<ul> <li>ERP saves up to 168,869 pieces of paper each year, equating to NTD\$37,827.</li> <li>1. Digital ERP verification instead of printed vouchers helps to save costs.</li> <li>2. We plan to introduce BarCode and portable devices with ERP, which will digitalize requisition and transfer forms in production and inventory management. Digital verification can reduce paper usage.</li> </ul>	Information Technology Department

For production expense refer to: Manufacturing expenses - mbalib.com

# ENERGY MANAGEMENT

TTY is the leading company in the domestic biotechnology industry. To fulfill its commitments to "Sustainable Development" and "Responsible use of resources," the company has conducted annual GHG inventory surveys since 2015, focusing on its 2 major manufacturing sites: Lioudu Factory and Chungli Factory. In 2022, the ISO 14064-1 GHG inventory inspection was completed and verified by a 3rd party and the verification certificate is expected to be obtained in year 2023.

Only through a comprehensive inventory of greenhouse gas emissions that we identify the carbon hotspots of greenhouse gas emissions on site. We can formulate proactive energy saving and carbon reduction measures, and establish shortterm energy-saving goals along with medium- and long-term implementation target plans. Plan and implement improvement



measures for energy-consuming equipment. In 2023, TTY saved a total of approximately 339,488.86 kWh of electricity and reduce emissions by 168.05 tonCO<sub>2</sub>e through 11 electricity-saving measures. In 2024, the implementation of 11 electricity-saving measures is anticipated to save 447,039.62 kWh of electricity and reduce greenhouse gas emissions by 221.28 tonCO<sub>2</sub>e. In the future, TTY will continue to evaluate the purchase or addition of green energy and energy-saving facilities, establish a green supplier management system, and participate in Climate Initiative organizations or alliances. It is hoped that TTY can implement energy management through practical actions such as energy conservation, carbon reduction, and search for alternative energy sources. in line with the company's environmental protection management policy.

## **Energy Consumption Statistics**

We observed an additional 7,175,085 MJ increase, representing a 10.11% rise in consumption in 2023 compared to the previous year. This increase was due to the production of lyophilized products at the Lioudu B1 factory, and the continuous operation of a temperature-humidity fixed clean room for powder and injection production at the B3 factory.

#### TTY Energy Consumption for the Recent 5 Years (Unit: MJ)

	Energy Type	2019	2020	2021	2022	2023
Lioudu	Natural Gas	10,323,547	11,411,672	10,920,001	13,090,459	15,311,685
Factory	Purchased Electricity	28,156,536	31,368,240	29,877,120	32,302,800	36,964,800
Chungli	Natural Gas	7,094,433	5,574,111	5,548,225	5,980,756	6,003,695
Factory	Purchased Electricity	20,711,880	20,604,600	20,145,600	19,590,480	19,859,400
	Natural Gas	17,417,980	16,985,783	16,468,226	19,071,215	21,315,380
	Purchased Electricity	48,868,416	51,972,840	50,022,720	51,893,280	56,824,200
	Total	66,286,396	68,958,623	66,490,946	70,964,495	78,139,580

Note: 1. Energy produced by natural gas boilers: 1 m<sup>3</sup> = 8000 kcal = 33,488,000 Joule

2. Purchased electricity is calculated as 1 kWh =3,600,000 Joule

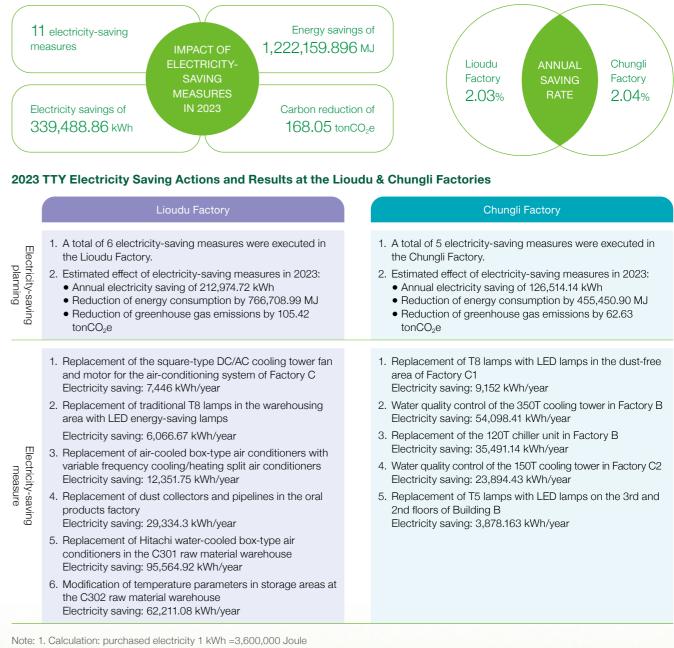
#### **TTY Energy Emission Intensity for the Recent 5 Years**

Year	2019	2020	2021	2022	2023
Energy Consumption (Unit: MJ)	66,286,396	68,958,623	66,490,946	70,964,495	78,139,580
Revenue (Unit: NTD Thousand)	4,466,308	4,221,836	4,535,610	5,061,606	5,505,542
Energy Emission Intensity (Unit: MJ / Revenue NTD Thousand)	14.0	16.3	14.7		
	14.8		14.7	14.0	14.2

Note: 1. The scope of energy consumption statistics includes the Lioudu and Chungli factories. 2. Revenue represents the consolidated sales revenue of the Group.

## **Energy Efficiency Policies**

In 2023, TTY's 2 major manufacturing site, Lioudu and Chungli factories reduce energy consumption and Scope 2 greenhouse gas emissions with a total of 11 electricity-saving measures, which is expected to save approximately 339,488.86 kWh of electricity per year. This will save 2.03% for the Lioudu factory and 2.04% for the Chungli factory respectively; we have also completed the planning of power-saving measures for next year and are expected to implement 11 electricity -saving measures in 2024, which is estimated to reduce 455,840.67 kWh of electricity per year.



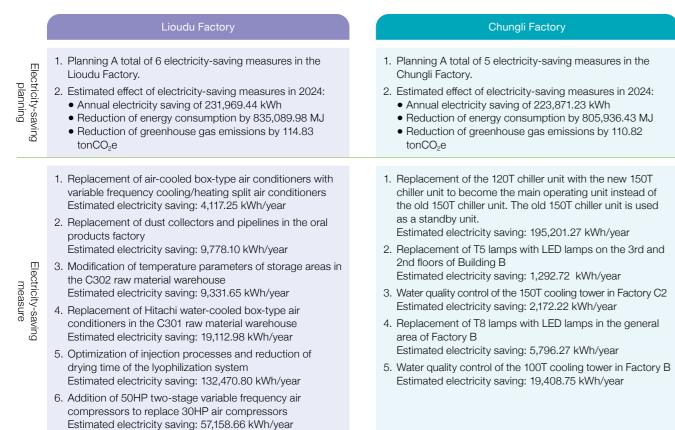
- 2. The discharge coefficient 2023 was not yet published. Therefore, the 2023 discharge coefficient published by the Bureau of Energy in 2022 of 0.495 kgCO<sub>2</sub>e /kWh was adopted in this report.
- 3. Annual electricity-saving rate = (Electricity consumption with the effect of electricity-saving measures)/(Electricity consumption with the effect of electricity-saving measures + Annual electricity consumption)

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	Chungli Factory
1	<ol> <li>A total of 5 electricity-saving measures were executed in the Chungli Factory.</li> </ol>
2	<ul> <li>2. Estimated effect of electricity-saving measures in 2023:</li> <li>Annual electricity saving of 126,514.14 kWh</li> <li>Reduction of energy consumption by 455,450.90 MJ</li> <li>Reduction of greenhouse gas emissions by 62.63 tonCO<sub>2</sub>e</li> </ul>
1	<ol> <li>Replacement of T8 lamps with LED lamps in the dust-free area of Factory C1 Electricity saving: 9,152 kWh/year</li> </ol>
2	<ol> <li>Water quality control of the 350T cooling tower in Factory I Electricity saving: 54,098.41 kWh/year</li> </ol>
3	<ol> <li>Replacement of the 120T chiller unit in Factory B Electricity saving: 35,491.14 kWh/year</li> </ol>
2	4. Water quality control of the 150T cooling tower in Factory C Electricity saving: 23,894.43 kWh/year
Ę	<ol> <li>Replacement of T5 lamps with LED lamps on the 3rd and 2nd floors of Building B Electricity saving: 3,878.163 kWh/year</li> </ol>

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#### 2024 TTY Electricity Saving Plans and Actions at the Lioudu & Chungli Factories



#### Note: 1. Calculation: purchased electricity 1 kWh = 3,600,000 Joule

2. The discharge coefficient for 2023 has not yet been published. Therefore, the 2023 discharge coefficient published by the Bureau of Energy in 2022 of 0.495 kgCO2e /kWh was adopted in this report.



## **GHG Emission Statistics**

TTY has gathered greenhouse gas emissions statistics annually since 2018. From 2018-2021, TTY independently gathered emission data of 2 manufacturing sites, the Lioudu Factory and Chungli Factory, according to emission coefficient data, and it has begun to establish a more comprehensive and complete inventory plan since 2022. TTY has conducted greenhouse gas emission verification through a thirdparty verification institution according to the ISO 14064-1 Greenhouse Gas inventory standards, and expanded the inventory scope to include the headquarters and Neihu PDC. The Company obtained the certificate in year 2023 after the inventory was completed.

In 2023, total emissions reached 12,738.5472 tonCO<sub>2</sub>e, and the emission intensity of greenhouse gases per NT\$1 million of operating revenue was 2.31, presenting a decrease compared to 2022. The Company expects to continually improve its performance in energy conservation and carbon reduction in the future.

### TTY Autonomous GHG Inventory in the Year 2019-2023 (unit: tonCO<sub>2</sub>e)

Types of GHG Emissions/Year	2019	2020	2021	2022	2023
Scope 1	977	953	925	1,535.3169	1,700.2181
Scope 2	7,236	7,740	6,975	8,232.4903	8,488.8048
Scope 1+ Scope 2	8,213	8,693	7,900	9,767.8072	10,189.0229
Scope 3 (Categories 3, 4, 5)	-	-	-	3,041.9354	2,549.5243
Total	8,213	8,693	7,900	12,809.7426	12,738.5472
Consolidated Sales Revenue of the Group (Unit: Revenue NTD Million)	4,466.308	4,221.836	4,535.610	5,061.606	5,505.542
GHG Emission Intensity (Unit: tonCO <sub>2</sub> e/ Revenue NTD Million)		2.06		2.53	2.31
	1.84		1.74		

Note: 1. The organizational scope has been established following an operational control approach. In 2019-2021, the scope of greenhouse gas emission data independently conducted by TTY included the Lioudu Factory and Chungli Factory. This did not include Scope 3 so this has not been verified. In 2022-2023, the scope included the headquarters, Lioudu Factory, Chungli Factory, and Neihu PDC. The scope of inventory included Scope 1, Scope 2, and Scope 3 (categories 3, 4, 5). Greenhouse gas emission data was verified by a third-party institution. Passing verification and obtaining a verification statement is planned for the second quarter of the coming year. As for greenhouse gas emissions in 2023, a corresponding verification statement is expected to be obtained in June 2024.

- were included in the calculation.
- same as that in 2022.
- corrected.

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2. In 2018, natural gas boilers were installed to replace the consumption of low-sulfur heavy oil. Therefore, the main emission source in Scope 1 was natural gas boilers. Types of greenhouse gases generated from the combustion of natural gas included CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, all of which

3. The main emission source of Scope 2 was purchased electricity. As per the data released by the Bureau of Energy, the carbon emission coefficient of electricity was 0.554 kgCO2e/kWh in 2017, 0.533 kgCO2e/kWh in 2018, 0.509 kgCO2e/kWh in 2019, 0.502 kgCO2e/kWh in 2020, and 0.509 kgCO<sub>2</sub>e/kWh in 2021 respectively. Since the carbon emission coefficient of electricity was not yet announced upon the verification in 2022 and 2023, the carbon emission coefficient of the previous year was adopted. Therefore, the carbon emission coefficient of electricity was 0.509 kgCO2e/kWh in 2022, the same as that in 2021. In 2023, the carbon emission coefficient of electricity was 0.495 kgCO2e /kWh, the

4. Instructions for information recompilation: Greenhouse gas emission inventory data in 2022 was corrected, and the statistical data of the headquarters and Neihu PDC as well as Scope 3 was added. Therefore, both total greenhouse gas emission data and intensity data were

# **AIR POLLUTANT CONTROL**

TTY has made every effort to reduce air pollution. The 2 main manufacturing sites adopted source classification to minimize air pollutants during manufacturing processes. Treatment technology at multiple sections has helped elevate the processing performance of the terminal preventive facility. Annual air pollutant discharge inspections and implementation have resulted in maintenance and training being put in place to ensure that pollutants fall within or are superior to the criteria of the "Standards for Air Pollutant Emission from Stationary Pollution Sources". In 2023, the 2 manufacturing sites of Lioudu and Chungli factories discharged particle pollutants totaling 5.742 kg of PM,  $10.24 \text{ kg of SO}_2$ , and 310.08 kg of NOx.



#### 2023 TTY's Material Gas Emission

	PM	SO <sub>2</sub>	NO <sub>x</sub>
Total Emission From the Lioudu Factory (unit: kg)	3.52	6.09	250.08
Total Emissions From the Chungli Factory (unit: kg)	2.22	4.15	60.00
Total	5.74	10.24	310.08

Note: The data from the verification report designated by the factories is utilized to calculate emissions (emissions per hour x operation hours of boilers per day x working days per year).

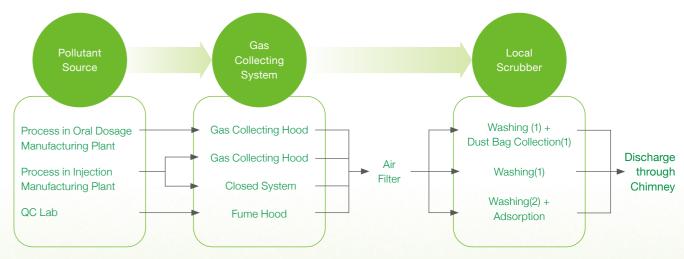
#### 2023 TTY Stationary Pollution Source Measurements

		РМ	SO2	NO <sub>x</sub>
Standards for Air Pollutant Emission from Stationary Pollution Sources		30 mg/Nm <sup>3</sup>	50 ppm	100 ppm
	Gas boiler (P001)	1 mg/Nm <sup>3</sup>	1 ppm	50 ppm
Lioudu Factory	Gas boiler (P002)	2 mg/Nm <sup>3</sup>	1 ppm	58 ppm
	Gas boiler (P003)	2 mg/Nm <sup>3</sup>	1 ppm	61 ppm
Chungli	Gas boiler (P001)	1 mg/Nm <sup>3</sup>	1 ppm	17 ppm
Factory	Gas boiler (P002)	2 mg/Nm <sup>3</sup>	1 ppm	28 ppm

Notes: No Persistent Organic Pollutant (POP), Volatile Organic Pollutant (VOP), or Hazardous Air Pollutant (HAP) are discharged from the Lioudu and Chungli factories.

Best Available Technology (BAT) controls air pollution at the source. TTY divides its prevention strategy into two phases: "effective reduction of emission from sources" and "strengthened management of terminal prevention facilities". In the first phase of source classification, manufacturing process air pollutants are classified according to their properties. Newly installed high-efficiency local scrubber will treat specific

#### Air Pollutant Control Process





toxic gases, dust, organic solvents, flammable gases, and odors through process such as washing, carbon absorbers or bag-type dust collectors equipment to treat the remaining emissions before they are released into the air. With complete multiphase processing through effective classification and treatment process, TTY has significantly increased the treatment efficiency of air pollution emissions.

# WATER RESOURCES MANAGEMENT

## **Reinforced Water Consumption Strategies**

As per the "Aqueduct Water Risk Atlas" of the World Resources Institute, water resource risks in Taiwan are all at a low to medium level (1-2), indicating it is not a water resource pressure area. All water sources for the major operation sites at the Lioudu and Chungli factories, as well as the Neihu Pharmaceutical Development Center of TTY, are 100% obtained from local water plants without the use of underground water, thereby ensuring the preservation of the water source. The quality of water discharged is free of high-density chemicals, and low-concentration wastewater is discharged to a sewage treatment plant in a local industrial zone for final processing after preliminary treatment in the factories. Water is not discharged into natural water bodies unless it complies with national effluent standards.

## Water Consumption Statistics

## TTY Water Discharge and Water Quality Monitoring Results From the Recent 5 Years (Unit: Million Liter/Revenue NTD Thousand)

	Water Quality	Unit	Local Sewer Connection Standards	2019	2020	2021	2022	2023
Lioudu	Water Discharge	Million Liter		68.292	76.961	91.323	79.936	101.391
Factory	COD	mg/L	600	73.42	22.68	72.94	26.28	40.24
	SS	mg/L	600	16.80	6.31	3.15	6.10	7.58
Chungli	Water Discharge	Million Liter		37.739	23.811	20.086	19.626	19.830
Factory	COD	mg/L	480	77.36	66.58	13.50	24.24	56.47
	SS	mg/L	320	3.53	4.53	3.55	7.40	12.38
PDC	Water Discharge	Million Liter	N/A	1.905	1.943	1.798	1.833	1.527
Total Water Di	scharge	Million Liter		107.936	102.715	113.207	101.395	122.748
Revenue		NTD Thousa	nd	4,466,308	4,221,836	4,535,610	5,061,606	5,505,542
Sewage Disch Intensity	large	Million Liter / NTD Thousa		0.0000242	0.0000243	0.0000250	0.0000200	0.0000223

In 2023, the water intake of TTY's Lioudu and Chungli factories, as well as the Neihu Pharmaceutical Development Center, was approximately 153.435 million liters, and the sewage discharge was about 122.748 million liters. Sewage discharge slightly increased by about 21.353 million liters compared to the previous year. No sewage was discharged by TTY as a result of unscheduled leakage or overflow. Furthermore, all sewage discharged complies with the Water Pollution Prevention Act, local governance laws, and the incoming water quality standards of the sewage treatment plants in the industrial zone. The COD and SS in sewage discharged by the

#### Comparison of the COD and SS Levels in the Effluent with the Local Sewer Connection Standards



Lioudu and Chungli factories are significantly lower than local sewer connection standards, without impacting nature and biological diversity. In the future, our comprehensive watersaving policy will undergo further expansion to encompass systematic water management. This will include optimizing the circulation system, recycling and reusing chilling tower water, upgrading chilling procedures, improving heat recovery rates, and reducing water demand. The importance of saving water is disseminated across all employee levels up to managerial, to ensure fundamental actions are taken.

#### **Chungli Factory**

The actual COD (56.47 mg/L) in sewage discharged in 2023 was 8.50 times below the local sewer connection standards (480 mg/L).

480 mg/L

#### 56.47 mg/L

### **Chungli Factory**

The actual SS content (12.38 mg/L) in sewage discharged in 2023 was 25.85 times below the local sewer connection standards (320 mg/L).

320 mg/L

12.38 mg/L

# **WASTE MANAGEMENT**

To fully understand the waste flow of factories and reinforce supplier audits, TTY also checks orders every week and tracks disposal vehicle GPS abnormalities. Additionally, the company follows supplier handling conditions every month and conducts on-site audits every year to confirm the output and flow after processing. Moreover, TTY implements irregular vehicle audits to confirm that waste disposal and handling contractors conduct business according to the laws. In 2023, the total waste generated by TTY in the Lioudu, Chungli, and Neihu factories was about 43.27 tons, among which hazardous waste was 28.43 tons, among which non-hazardous waste accounted for 14.84 tons. All such waste was delivered to qualified disposal contractors for off-site treatment. The Chungli and Lioudu factories achieved a 100% compliance rate in weekly and monthly audits, without violating the Waste Clearance Act or other relevant laws or causing any impact to the local environment. Meanwhile, the Neihu factory expects and arranges to complete one on-site audit in 2023.

TTY also actively responded to the resource recycling policy and promoted its implementation at the Lioudu factory in 2022. Flammable emissions can be recycled through resource recovery. After the flammable components of the waste are completely burned across the emission treatment plant, the steam heat generated is restored in the "steam boiler,", and then the "steam turbine" converts the heat energy into electrical energy to achieve waste reduction and resource recovery. Therefore, the overall recoverable energy of TTY is greatly increased, effectively realizing recycling and reuse.

To fulfill the sustainable government goals of environment friendliness, TTY not only arranges professional technology personnel as per Article 28-2 of the Waste Clearance Act but also aggressively trains dedicated personnel. In 2023, TTY employed a total of 4 dedicated waste professional personnel (2 in the Lioudu factory, 1 in the Chungli factory, and 1 in the Neihu factory). They submitted a waste clearance plan in compliance with the law, which was approved by the designated agency of the municipality, county (city) competent

#### Waste Directly Disposed of by TTY through Disposition Operations in the Recent 5 Years (unit: tons)

	Disposal Operations/Year	2019	2020	2021	2022	2023
	Incineration (including energy recycling)	-	-	-	14.82	19.83
H 2	Incineration (excluding energy recycling)	13.75	22.09	22.23	13.73	8.59
Hazahone Waste	Landfill	-	-	-	-	-
Maeto	Other Disposal Operations (physical treatment)	2.08	3.09	3.36	-	-
	Total	15.83	25.18	25.59	28.55	28.42
	Incineration (including energy recycling)	-	-	-	-	-
Non-hazardoue Waete	Incineration (excluding energy recycling)	1.01	No clearance	4.27	5.53	2.20
	Landfill	-	-	-	-	-
Waste	Other Disposal Operations (physical treatment)	9.12	13.95	15.16	15.65	12.64
	Total	10.13	13.95	19.43	21.18	14.84

Note: The statistical scope of data was the declared volume of waste generated from Lioudu Factory, Chungli Factory, and Neihu Factory of TTY. The data was expressed with 2 decimal places after rounding off.

### 2023 Disposal Contractors Audit Results

	Weekly Audit Rate	Monthly Audit Rate	No. of Physical Audit	No. of Unscheduled Follow-ups
Chungli Factory	100%	100%	0	1
Lioudu Factory	100%	100%	4	4
Neihu Factory	100%	100%	1	0

#### TTY Wastes Categories by Groups in the Recent 5 Years (unit: tones)

Year	2019	2020	2021	2022	2023	
Hazardous industrial waste	15.83	25.18	25.59	28.55	28.43	
Non-hazardous industrial waste	10.13	13.95	19.43	21.18	14.84	↓30% Reduction
Total wastes	25.96	39.13	45.02	49.73	43.27	↓13% Reduction

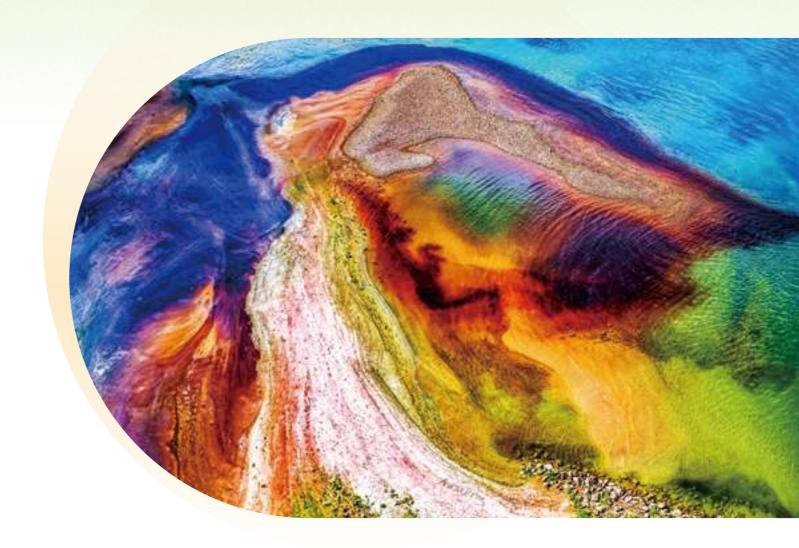
authority, or central competent authority. TTY also enters into contracts with qualified clearance and processing institutions to handle business and daily waste according to the law. In addition, the Management of Waste Clearance and Tracing Regulations is based on Article 14-2 of the "Regulations for Public and Private Waste Clearance" and Disposal Organizations. All clearance machines and devices of waste contractors need to be declared and approved. Meanwhile, all vehicles delivering TTY's business waste must be equipped with GPS, and the vehicle trace return rate must reach 90% to facilitate real-time monitoring by the competent authority and TTY.

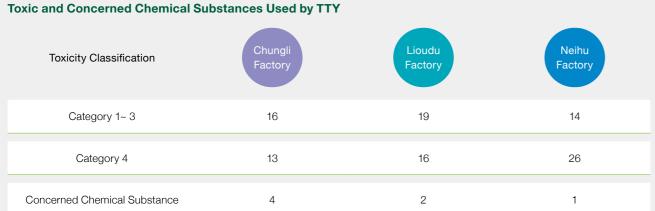
# **TOXIC SUBSTANCE MANAGEMENT**

As per the "Toxic and Concerned Chemical Substances Control Act," TTY goes beyond the regulations by educating relevant managerial personnel and assisting them in acquiring certifications such as toxicity professional management personnel. Although toxicity and concerned chemical substance operation volumes in all factories are lower than statutory standards. A total of 7 colleagues in the Lioudu and Chungli factories have acquired a toxicity professional management personnel certificate (6 in Lioudu and 1 in Chungli). Additionally, the Neihu factory has established individuals in charge of toxicity control for chemicals as per the toxicity management flow of the Company.

All chemicals must be assessed by internal toxicity management personnel to determine if they fall under government-controlled toxicities before making a purchase. In this case, an application for a toxicity permit, registration documents, or approval documents must be filed with the local environmental bureau. Furthermore, a usage record must be maintained after each use, and managerial personnel must report the volume of usage online monthly. Before using toxic chemical substances, TTY applies for the required documentation and prepares an SDS and Basic Disaster Prevention Data Sheet. The containers for such substances are labeled with cautionary and warning signs. Additionally, TTY has joined the National Disasters Prevention and Protection Commission, an organization that responds to disasters with agreed-upon protocols for incidents occurring during the use or storage of toxic chemical substances. Any incidents should be reported within 30 minutes, and contingency teams must reach the location within 2 hours.

To enhance the response procedure and coordinate with the Ministry of Environment, a system for training management and obtaining qualified licenses for emergency responders of toxic and chemical substances should be established. Relevant personnel in each factory should conduct trial calculations based on risk levels and complete personnel registration as per the "Regulations on the Management of Emergency Responders of the Toxic and Concerned Chemical Substance". In 2023, 4 professional emergency responders were registered, including 1 from Neihu Factory at the general level, 1 from Chungli Factory at the general level, 1 from Lioudu Factory at the operational level, and 1 from Lioudu Factory at the technical level respectively.





Note: Categories standards are based on the "Toxic and Concerned Chemical Substances Control Act"

#### **TTY Toxicity Management Flow**



As per the Government Chemicals Regulation, the department must update its hazardous materials inventory list and a copy must be forwarded to the Department of Environment, Safety, and Health before any purchase.



- opportunities.

- in 2023.
- 417 students.



- Workplace Happiness
- Talent Cultivation
- Occupational Safety and Health
- Social Participation



**\* 82** new employees joined in 2023, providing **508** work

★ 48.33% of managerial positions are filled by females, demonstrating our commitment to gender equality in the workplace.

★ In 2023, the average salary of entry-level positions was more than **1.43** times higher than the local minimum salary.

★ In 2023, the average training time of each employee was **4.58** hours.

★ Free flu vaccines were offered to 803 employees and their relatives

★ The Summer Internship Program (SIP) has been held for 16 consecutive years, with the total number of beneficiaries reaching

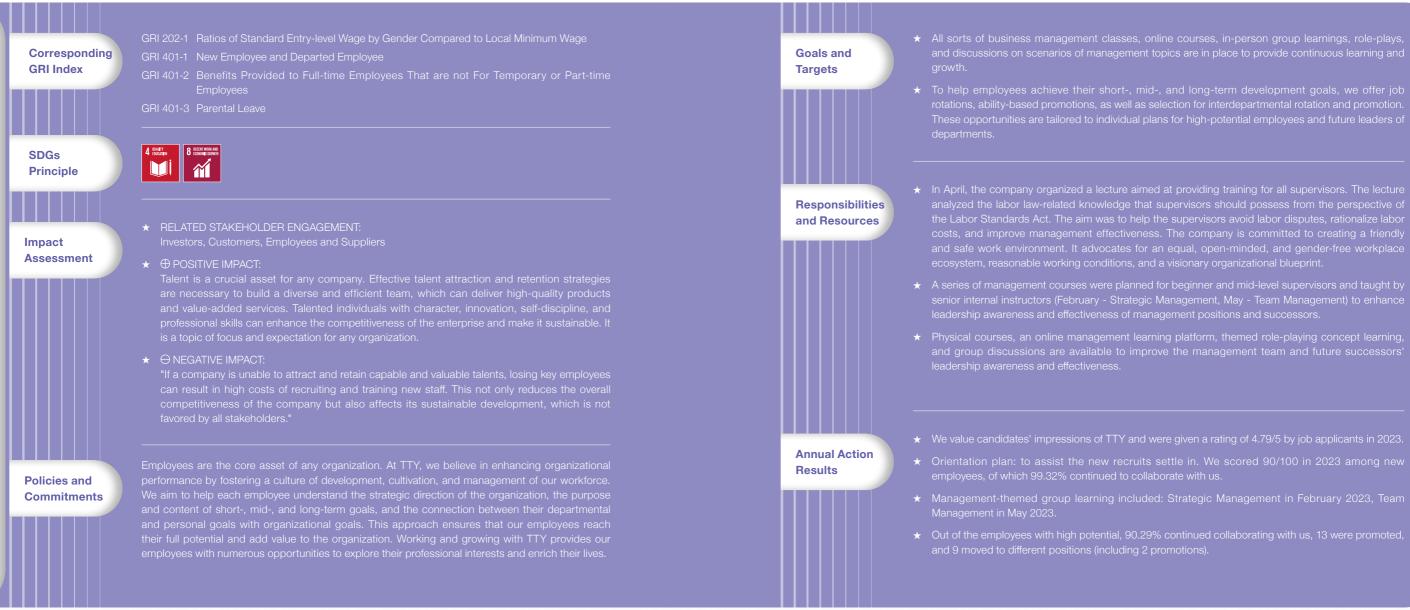
## 000 WORKPLACE HAPPINESS

We believe that our employees are one of our most valuable assets. That's why we are committed to providing a friendly work environment that allows everyone to reach their full potential. Our efforts have been recognized by HR Asia, who named us one of the "2020 & 2022 Best Companies to Work for in Asia" in the Taiwan area. We scored excellently in areas such as company culture, organizational leadership, employee recognition and satisfaction, and organizational atmosphere. We are proud to have been recognized for our outstanding performance across many categories, including our encouragement of constant self-enhancement and learning, and our support of crossdepartmental collaboration and position rotation.

At the Health 2.0 Conference in 2022, TTY won "Best Company in Healthcare Industry," marking a significant milestone on its path towards internationalization.

## At the Health 2.0 Conference in 2022, TTY won "Best Company in Healthcare Industry"

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## Diversity in the workplace

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Diversity and inclusivity are at the core of TTY's continuous innovation. TTY is proud to have a team of employees that represents a wide range of backgrounds, beliefs, values, races, ages, genders, and experiences. Everyone is encouraged to express their talents and contribute to the company's growth. At TTY, we strive to create an inclusive and nondiscriminatory workplace that accommodates all employees, regardless of their gender, and the atmosphere enables employees to perform their duties and share their experiences and perspectives. As we operate in the high-tech industry, expertise, and specific knowledge are essential to our work in the pharmaceutical sector.

By the end of 2023, TTY will have 508 full-time employees, 23 fixed-term employees (such as consultants and research nurses), and 38 dispatched laborers to adjust staffing needs. All regular employees are of local nationality, and the proportion of female employees has remained stable at over 50% for the past 5 years. Additionally, to promote equality in the workplace, 4 indigenous people and 4 people with disabilities (including 2 with severe physical and mental disabilities) were employed in 2023. The proportion of vulnerable groups among all employees is 1.57%.



#### **TTY 2023 Employee Structure**

		Male		Female		Total	
		Number	%	Number	%	Number	%
	≤ The 30s	25	4.92%	32	6.30%	57	11.22%
4	31s-50s	154	30.31%	201	39.57%	355	69.88%
Age	≥ 51s	40	7.87%	56	11.02%	96	18.90%
	Subtotal	219	43.11%	289	56.89%	508	100.00%
	Management and Administration	28	32.18%	59	67.82%	87	15.29%
	Sales and Marketing	48	38.71%	76	61.29%	124	21.79%
Job Category	R&D	28	45.16%	34	54.84%	62	10.90%
	Factory	115	48.94%	120	51.06%	235	41.30%
	Subtotal	219	43.11%	289	56.89%	508	100.00%
	Full-time Employe	219	43.11%	289	56.89%	508	89.28%
Type of	Temporary Employment- Contracted	8	34.78%	15	65.22%	23	4.04%
Labor and Employment	Temporary employment- Dispatch	10	26.32%	28	73.68%	38	6.68%
	Subtotal	237	41.65%	332	58.35%	569	100.00%

Note: 1. Temporary workers, whose salaries are paid by a work dispatch agency, are categorized as non-employee workers.

2. In 2022, the employee structure consisted of 521 full-time employees, 25 contracted employees, and 37 dispatched employees; There are no significant changes compared to this year.

3. The scope of employee statistics includes TTY Biopharm Company Limited (headquarters, Chungli factory, Lioudu factory, PDC, Neihu factory), as of December 31, 2023.

An employee satisfaction survey was conducted for new employees who had reached 3 months of tenure. The survey used a scoring method that included five major items: environmental adaptation, interaction, work adaptation, life adjustment, and counselor care (20 points per item). The system sent the questionnaire with a notice to fill it within 6 months. By the end of 2023, 46 recruits had been surveyed with a satisfaction rate of 90%.

#### TTY 2023 Number and Percentage of New and Departed Employees

		Male		Female		Total	
	Age	Number	%	Number	%	Number	%
	≤ The 30s	16	64.00%	11	34.38%	27	47.37%
New	31s-50s	25	16.23%	27	13.43%	52	14.65%
Employees	≥ 51s	1	2.50%	2	3.57%	3	3.13%
	Subtotal	42	19.18%	40	13.84%	82	16.14%
	≤ The 30s	7	28.00%	7	21.88%	14	24.56%
Departed	31s-50s	34	22.08%	33	16.42%	67	18.87%
Employees	≥ 51s	13	32.50%	5	8.93%	18	18.75%
	Subtotal	54	24.66%	45	15.57%	99	19.49%

Note: 1. New employee percentage = no. of the same gender in each age category/no. of employees in the category by the end of 2023. 2. Departed employee percentage = no. of the same gender in each age category/no. of employees in the category by the end of 2023.

CHAPTER 6 SOCIAL

## **Employment Protection Rights**

#### Protecting Employee Rights

In order to ensure a just and secure workplace, our company adheres to globally recognized human rights standards, such as the "ILO Declaration on Fundamental Principles and Rights at Work," the "Universal Declaration of Human Rights," "UNGC 10 Principles," and "United Nations Guiding Principles on Business and Human Rights, UNGPs." Our human rights policy can be found on our website, and we follow all local labor regulations to treat every stakeholder with equal respect. To prevent similar incidents in the future, we will provide training that emphasizes communication and management skills for our management team.

In compliance with international human rights standards and local laws and regulations, the Company strives to protect the basic human rights of its employees and to recognize and comply with international human rights conventions. The Company must not violate human rights and must protect the legitimate rights and interests of its employees.

We ensure equal job opportunities by eliminating discrimination, implementing workplace diversity, and ensuring that employees are not subjected to any discrimination or unfair treatment based on gender, race, age, marital status, religion, political position, etc.

Forced labor or child labor that does not meet the minimum legal age is prohibited. No forced, compulsory labor or child labor was permitted at the Company in 2023.

The Supplier Sustainability Management Assessment, which reviews suppliers' performance regarding delivery time, quality, customer complaints, supportiveness, and sustainability, verified that in 2023, no forced or compulsory labor or other material risks were committed by our suppliers.

We ensure a safe and healthy working environment by following relevant laws and regulations, implementing strong occupational safety mechanisms, and providing health education and training to ensure workplace and personal safety protection. We have also established an Occupational Safety and Health team, held labor meetings, and implemented complaint-handling channels to continue improving the safety and health conditions of the working environment, reduce the risk of occupational injuries, and ensure the physical and mental health of employees and that mutual rights are observed.

We follow risk management and assessment regulations and approaches to safety and health activities and management; we accommodated ISO 45001 in place and completed independent verification.

We organize health check-ups and various activities to prevent possible health risks and assist colleagues with their physical and mental health and work-life balance. Workers interact with each other by participating in clubs, and the company also offers childcare services to help employees with their childcare needs.

#### Harmonizing Labor-employer Relations

TTY labor meetings are attended by senior executives and colleagues from various departments. These meetings are held every 3 months to discuss topics such as the revision of labor conditions. TTY strictly adheres to the labor laws and regulations set by the Taiwan government. During the reporting period, no significant operational changes that adversely affected employee rights or led to a large number of contract terminations occurred.

In compliance with Article 16 of the Labor Standards Act and the Act for Worker Protection in Mass Redundancies, notice is required before redundancies when upcoming major operational alterations or changes in labor conditions may cause damage to the rights and interests of workers. At least 10 days' notice is required if a person has been employed between 3 months and 1 year; 20 days' notice if employed between 1 and 3 years; and 30 days' notice if employed for 3 years or more. After receiving notice, a worker may ask for a leave of absence during the hours of work to find a new job. Such leave of absence may not exceed 2 working days per week and wages shall be paid during such leave. For each terminated employee, TTY shall submit a report with arrangements for career guidance or vocational training needs. Severance pay will be issued in compliance with Article 11 of the Labor Standards Act.

#### Maternity Health Protection

The Gender Equality in Employment Act specifies that employees have the right to apply for unpaid parental leave (UPL). This leave can be requested before any of their children reach the age of 3, but the maximum period of leave allowed is 2 years. While on UPL, employees are entitled to continue participating in their original social insurance program.

#### **TTY 2023 Parental Leave Statistics**

(a) Number of employees qualified for parental leave applications in 20

(b) Number of parental leave applications in 2023

(b/a) UPL Reinstatement rate

(c) Expected number of employees reinstated in 2023

(d) Actual number of employees reinstated from parental leave in 2023

(d/c) Retention rate

(e) Actual number of employees reinstated in 2022

(f) Actual number of employees reinstated from parental leave in 2022 and have worked continuously for at least 1 year

#### (f/e) UPL retention rate

Note: 1. Based on employees who applied for maternity or paternity leave in the past 3 years (2021-2023). 2. Expected and actual reinstatement date in 2023. 129



	Male	Female	Total
2023 <sup>1</sup>	31	39	70
	2	5	7
	6.45%	12.82%	10.00%
	2	8	10
23 <sup>2</sup>	1	4	5
	50.00%	50.00%	50.00%
	2	2	4
2	2	0	2
	100.00%	0.00%	50.00%

## **Employee Benefits**

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Apart from labor insurance, health insurance, special leave, maternity leave, and parental leave as prescribed in the Labor Act, we also offer group accident insurance, travel leave, paid sick leave, a year-end bonus, and regular health examinations. The Welfare Committee also organizes cash gifts for employees' birthdays, weddings, maternity, festivals (Dragon Boat Festival/ Mid-autumn Festival), condolences, bereavement, disaster aid, education subsidies (learning aids and scholarships for employees' children), and travel subsidies. The TTY Retirement Management Guidelines and Regulations specify retirement eligibility and pension for full-time employees, fully in compliance with local labor regulations. TTY labor pension is certified and calculated by CPA and disclosure, more details regarding pension and retirement eligibility are described on the Company Annual Report .

The Welfare Committee adopted the TTY Welfare Subsidy Guidelines and allocated NT\$20,000 to each full-time employee in 2023. A total of 475 employees received the full subsidy, while 54 others who have either worked at TTY for less than 12 months or left TTY after receiving a subsidy, received a prorated subsidy based on their tenure.

As winter approaches, flu viruses thrive alongside COVID-19. In 2020, we cooperated with the national epidemic prevention mechanism and again arranged vaccinations for all employees and up to 3 of their immediate family members. Therefore, a total of 803 vaccines were given to employees, their families, and directors. As a corporation that takes its corporate social responsibility seriously, TTY does not waiver in its efforts to maintain public health and prevent epidemics, helping to build a safe and secure social protection network for employees and their families and create a prosperous society.

## **Remuneration Structure**

Employees' contributions are closely related to company growth. Therefore, TTY strives to create a competitive salary based on the local basic wage and sets a minimum internal monthly approved salary of NTD\$26,400 to meet current basic wage requirements. After taking into account various factors such as job category, education, and experience, the average salary of entry-level personnel at TTY is 1.43 times the basic salary for both men and women. Furthermore, to ensure gender equality in the workplace and eliminate any gender discrimination, TTY maintains no gender pay gap in employee salaries. The average male-to-female salary ratio is 1.003:1. The ratio of the annual remuneration paid to the highest-paid employee to the average annual remuneration of all employees (excluding the highest-paid employee) based on the average full-time equivalents is 12.1:1. Besides, compared with the previous year, the annual total salary increases percentage ratio is 4.94:1



The Ratio of the Average Salary of Entry-level Employees to the Local Minimum Wage of TTY for the Recent 5 Years (unit: NTD)

Year	Minimum Wage in Taiwan/ Month	Average Standard Salary of Entry-level Personnel/Month			Salary of Entry-level num Local Salary
		Male	Female	Male	Female
2019	23,100	37,179	35,644	1.61	1.54
2020	23,800	36,913	35,645	1.55	1.50
2021	24,000	37,807	36,262	1.58	1.51
2022	25,250	38,018	37,284	1.51	1.48
2023	26,400	37,658	37,771	1.43	1.43

Note: 1. Entry-level" refers to personnel with Grade 3.

2. The difference in the average salary between entry-level male and female personnel is mainly due to the difference in work content and work attributes.

#### Salary Plus Compensation Ratio of Male and Female Across Job Categories

Job Category	Management and Administration	Sales and Marketing	R&D	Factory	
Salary + Compensation	Male : Female	Male : Female	Male : Female	Male : Female	
Ratio of Male and Female	1.24 : 1	1.26:1	1.26 : 1	1.02:1	

#### Average and Median Annual Salaries of Full-time Employees not Holding Supervisory Positions in TTY for the Recent 5 Years

Year	Average Annual Salary	Median Annual Salary
2019	1,116	976
2020	1,126	936
2021	1,169	992
2022	1,206	1,021
2023	1,244	1,051

Note: Supervisory positions include directors, employees in managerial positions, consultants, and some other roles.

## 000 **TALENT CULTIVATION**



"Acquiring knowledge quickly, transferring knowledge effectively, and transforming knowledge into consensus and organizational ability as soon as possible" is a critical path for a corporation to build core competitiveness. Therefore, TTY has continued to innovate and cultivate a great education, training, and development system. TTY University has been offering educational training to all employees since 2012. The courses are divided into initial, advanced, and high-level courses to cater to the needs of all colleagues in the company, regardless of their expertise. The depth of the content varies according to the level of the course.

#### 2023 Employee Training Program Results

Course Satisfaction 4.725/5

### New Employee Training

The Company conducts orientation for new employees over several days, both in-person and online, to familiarize them with its regulations quickly and effectively. This helps to mitigate business risk. This includes the following training sessions: Introduction to Confidentiality Management Regulations, Introduction to GMP Management, Introduction to Regulations TTY University combines the six programs of R&D, Technical Operations, Quality, Marketing, Sales, Leadership and Management, and Soft Skill programs. In 2023, there were 24 physical and online courses, not only helping colleagues engage in continuous professional development in their professional field but also aiding the understanding of roles in other functions in the industrial chain to provide them with holistic industrial and organizational operations knowledge to create the best organizational performance.



Governing Pharmaceutical Patents, Introduction to the TIPS (Taiwan Intellectual Property Management System), Basics of Intellectual Property, Drug Safety Supervision, Information Security Education, Introduction to GDP Management, Introduction to Trade Secrets, and Environmental, Safety and Health. 82 attendees participated in orientation training sessions in 2023.

### **Employee Training**

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To raise awareness of business risks and Ethical management, we present various online and in-person courses. The former focuses on Drug Safety Supervision, SDGs Good Life Goals, Information Security, Trade Secrets, Insider Trading Prevention and Material Business Incident Guidelines, promotion of Corporate Ethical Management, Building a Friendly Workplace, and Introduction to GDP Management. All employees have attended and completed training. Internal and offsite training for 2023 calculated an average of 4.58 hours of classes per employee, of which male Factory staff representatives received the most training, topped by 5.70 hours per person; followed by 5.66 hours of female Sales and Marketing attended.

#### Average Training Hours of Each Employee Based on Gender and Job Category in 2023

Job Category		Male	Female	Subtotal
	(a1) The actual number of people during the reporting period	30	59	89
Management and Administration	(b1) Training hours during the reporting period	167	285	452
	(b1/a1) The average number of training hours during the reporting period	5.57	4.83	5.08
	(a2) The actual number of people during the reporting period	49	77	126
Sales and Marketing	(b2) Training hours during the reporting period	125.3	436	561.3
	(b2/a2) The average number of training hours during the reporting period	2.56	5.66	4.45
	(a3) The actual number of people during the reporting period	28	34	62
R&D	(b3) Training hours during the reporting period	93.24	123.3	216.54
	(b3/a3) The average number of training hours during the reporting period	3.33	3.63	3.49
	(a4) The actual number of people during the reporting period	116	120	236
Factory	(b4) Training hours during the reporting period	661.3	457.5	1,118.8
	(b4/a4) The average number of training hours during the reporting period	5.70	3.81	4.74
Total	(Q) Hours	1,046.84	1,301.80	2,348.64
Fotal number of employees at he end of the reporting period	(R) Number	223	290	513
The average number of training hours per employee	(Q/R) Hours	4.69	4.49	4.58

## Talent Development

In TTY we promote an environment of continuous learning, and this is what motivates our workforce. In real terms, employees seek to advance their careers through management programs, and internal and cross-subsidiary/affiliate job rotations.

### **TTY 2023 Regular Performance Review Rates**

Job Category		Male	Female	Subtotal
	(a1) Total number of employees at the end of the reporting period	28	59	87
Management and Administration	(b1) Number of employees undertaking regular performance and career development reviews	25	56	81
	(b1/a1) Percentage	89.29%	94.92%	93.10%
	(a2) Total number of employees at the end of the reporting period	48	76	124
Sales and Marketing	(b2) Number of employees undertaking regular performance and career development reviews	47	72	119
	(b2/a2) Percentage	97.92%	94.74%	95.97%
	(a3) Total number of employees at the end of the reporting period	3,928	43	62
R&D	(b3) Number of employees undertaking regular performance and career development reviews	28	33	61
	(b3/a3) Percentage	100.00%	97.06%	98.39%
	(a4) Total number of employees at the end of the reporting period	115	120	235
Factory	(b4) Number of employees undertaking regular performance and career development reviews	109	119	228
	(b4/a4) Percentage	94.78%	99.17%	97.02%
	(Q) Total number of employees at the end of the reporting period	219	289	508
Total	(R) Number of employees undertaking regular performance and career development reviews	209	280	489
	(Q/R) Percentage	95.43%	96.89%	96.26%

#### Performance Evaluations

In 2023, 96.26% of our employees underwent regular performance reviews, of which 209 employees were male with 42.74%, and 280 were female with 57.26%. The remaining 3.74% were new employees in their probation period. Before the end of the new hiring period, supervisors provide performance evaluations by filling in the "New Employee Probation Performance form."

#### Job Rotation and Promotion

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Apart from various software and hardware training programs and other such resources, further learning and development plans suitable for each level and role were developed under the Successor Project in 2019. The results of the 2023 plan were as follows:

Year	2020	2021	2022	2023
Rotation	12 employees	10 employees	6employees (including 3 people who received a promotion)	9employees (including 2 people who received a promotion)
Promotion	24 employees	22 employees	17 employees	13 employees

• To cater to the developing needs of all levels, themed group learning guided by contracted professional mentors prompt discussions of management topics (February - Strategic Management; May - Team Management) and role-playing. Internal trainers reinforce management abilities through classes

• To fulfill everyone's short-, mid- to long-term development goals, job rotations, ability-based promotions, as well as selection for interdepartmental rotation and promotion are available for employees of high potential and future leaders of departments, tailored as individual plans. There are a total of 13 promotions and 9 rotations in 2023 (including 2 promotions).



#### Succession Planning and Operation

#### Personnel evaluation committee members of management positions at all levels



Note: BU refers to a business unit or center

As part of TTY's succession planning, the core values of successors must be consistent with the Company's, and they must demonstrate integrity, commitment, and innovation, and have earned customers' trust.

By the provisions of Corporate Governance formulated by TTY, the directors selected by TTY fully consider diversity and formulate appropriate policies based on the Company's operations, operation type, and development needs, including the following 2 criteria:

- 1. Basic conditions and values: gender (at least 2 female directors), age, nationality, culture, etc.
- 2. Professional knowledge and skills: professional background (such as law, accounting and taxation, biotechnology and medical industry, finance, marketing, or technology), professional skills and industrial experience, etc. In 2021, TTY re-elected all directors considering their overall skills and characters, and all candidates met the qualification review and relevant specifications.



Since December 29, 2016, TTY has implemented Performance Evaluation Measures for the Board of Directors and Functional Committees to evaluate the performance of directors and ensure the effectiveness of the operations of the Board of Directors through performance evaluations. Items under assessment include control of the Company's objectives and tasks, responsibility cognition, operation participation, internal relationships operation, and communication, professional functions, further advanced training, internal control, and specific opinions, as a reference for the selection of directors in the future.

Moreover, employees with leadership qualities and outstanding performance are offered the opportunity to transfer to other positions within the Company. We believe in expanding our future workforce from external sources as well. To ensure sustainable growth, we conducted 2 business management programs in 2023, with an average of 23 employees trained in each session. The programs received an impressive 4.6/5 satisfaction rate from the attendees, and as a result, 9 employees were transferred to new positions within the Company.

# **OCCUPATIONAL SAFETY AND HEALTH**

## ISO 45001: 2018 Occupational Safety and Health Management Systems

In December 2022, we became an ISO 45001: 2018 certified company, and aim to provide a safe and healthy workplace, allowing us to identify and prevent risks, and protect and provide a safe and reliable workspace, minimizing the possibility of incidents and illnesses among employees, and improve legal compliance.

- Hazard identification. Locate any potential hazards to employees in factory operations and control risk levels based on management.
- Safety labels. Traffic routes of personnel, vehicles, and shipping goods must be clearly labeled to warn people.
- Control factory entrance access (supplier, customers, and visitors).
- · Employee health examinations, equipment, device, and production process inspections to ensure workplace safety.



ISO 45001開業安全衛生管理系統 ISO 450012018 Occupational health and unrey management systems 職業安全衛生政策 際行法規 降気危害 影可設規 降気危害 影可設備 健康編唱 【管理代表】 原行人算長 副詞的に回って

TTY obtained ISO 45001: 2018 Occupational Safety and Health Management System Certificate (Validity date: 30/12/2022~29/12/2023)

## Occupational Safety and Health Management

To ensure the safety of our employees, we provide a range of insurances including labor and health insurance, group insurance, accident insurance, occupational injury insurance, cancer insurance, and travel insurance for business trips. Additionally, we also have public accident liability insurance for each operation site. We have qualified and certified fire protection management personnel stationed in each factory, and a fire protection plan is formulated according to local laws and regulations. Regular public safety equipment inspections of buildings and fire protection facilities are conducted and reported to the competent authority to ensure the safety of all employees.

An Occupational Safety and Health Management Committee has been set up in the Chungli and Lioudu factories by local laws and regulations. Neihu PDC is excluded from the regulatory standards but formed a Safety and Health Management Promotion Team to take charge of relevant affairs. Members call regular meetings and review occupational safety issues, ensuring occupational health and safety supervision, as well as planning suggestions accordingly. At least a third of members are accounted for by labor representatives. An "Occupational Safety and Health Work Code" and "Occupational Safety and Health Management Plan" have been drafted under the "Occupational Safety and Health Act" and relevant laws. Additionally, each factory shall establish an occupational safety and health unit comprising management staff and first-aid personnel.

## 2023 The Composition of the Occupational Safety and Health Committee

Members of the OSH Committee	Number
OSH specialists	1
Managers, supervisors, and instructors of each unit	3
Engineers	1
Medical staffs	1
Labor representatives	3
Total	9

#### Hazard Risk Identification and Accident Investigation

TTY senior supervisors and department heads have conducted hazard identification and risk assessment by the provisions of ISO 45001 Occupational Safety and Health Management System to identify hazards and risks caused by changes in the organization, Occupational Safety and Health Management System or its activities, and proposed management plans or tracked risk opportunities and control measures. When an accident occurs, TTY has standardized the accident notification and accident investigation process by the relevant provisions of the Occupational Safety and Health Act. By investigating accidents, the causes and potential consequences of accidents can be understood, and preventive and improvement measures can be taken in the future. In addition, to effectively manage and track accident investigation reports, the unit in which an accident occurred must provide an accident investigation report and improvement countermeasures. The case will be closed only after approval by the top supervisor of the factory.

#### Contractor Occupational Safety Management

To ensure the safety and health of employees and contractors, TTY complies with Article 26 of the Occupational Safety and Health Act which states that when all or part of the business is delivered to a contractor, the contractor must be informed in advance about the working environment, and all known hazardous factors. Safety and health regulation measures are to be adhered to per TTY's Contractor Safety, Health, and Environmental Management Standards. Before outsourcing certain work, the 2 parties must sign a joint contract. During the contract period, in addition to observing the provisions of the contract, both parties should also abide by relevant laws and regulations, such as the government's occupational safety and health regulations, environmental protection, and fire hazard-related regulations. In addition to providing complete occupational safety and health education and training for TTY employees, the Company also conducts occupational safety

and health education and training for dispatched employees and contractors. In the year 2023, TTY held 4 training sessions for dispatched personnel, totaling 6 participants, and 12 sessions for contractors, totaling 90 participants. In addition, the Company also provides health consultation services for dispatched personnel. If dispatched or contracted personnel encounter an emergency, the Company will provide basic emergency medical assistance and assist in sending them to the nearest hospital for a consultation.

For major engineering contracts or construction work, TTY also requires contractors to designate a person in-charge of the contracted project during the design stage and before the start of each project phase as the commander, supervisor, and coordinator of large-scale construction. Reports covering hazard identification, risk assessment, and measures to control such risk according to the assessment results should be presented based on the design, construction, and execution methods. The contractor should receive confirmation and approval from TTY before any formal construction work begins. In the year 2023, TTY did not record any occupational hazards with contractors.

#### Personal Protective Equipment

We value and protect the safety of each product we make. Personal protective equipment (PPE) is used to keep our operators safe from certain occupational hazards. By relevant occupational safety and health laws and regulations, TTY conducts environmental harmful component inspections for different processes and production lines to assess the necessity and effectiveness of protective equipment and determine the working environment.

For example, glove boxes effectively allow factory workers to avoid contact with chemicals, and spill kits are provided for an immediate response to chemical spillages or leakages. This ensures that injuries can be contained, and the disaster mitigated.

In addition, PPE is updated depending on the process requirements and use conditions so that production line employees receive maximum protection. For example, masks and protective clothing are all disposable, and respiratory protective equipment is replaced according to the degree of dust adsorption.

#### Different Occupational Safety and Health Protection Equipment for Different Processes

Unit	Process	Hazard Identification	Corresponding Protective Equipment		
Oral Section	Weighing process	Organic solvents and dust	Powered air-purifying respirators (PAPR)		
	Crushing process	Noisy workplace	Hearing protection		
	Ingot shaping process	Noisy workplace	Hearing protection		
	Coating process	Organic solvent	Respiratory protective equipment		
Injection Section	Weighing process	Organic solvent	Glove boxes, chemical-resistant gloves		
Physical and Chemical Section	Chemical experiment	Organic solvent	Respiratory protective equipment, chemical-resistant gloves, chemical fume hood		
Microbiology Section	Microbiological experiment	Microbial contamination	Biosafety cabinet		

#### **Occupational Injury Statistics**

#### **Occupational Injury Statistics of TTY Employees for the Recent 5 Years**

Year	Working Hours	Number of Recordable Occupational Injuries	Frequency Rate of Recordable Occupational Injuries	Number of Severe Occupational Injuries	Frequency Rate of Severe Occupational Injuries
2019	1,155,097	0	0.00	0	0.00
2020	1,183,759	2	0.34	0	0.00
2021	1,147,336	2	0.35	0	0.00
2022	966,168	0	0.00	0	0.00
2023	1,078,336	1	0.19	0	0.00

Note: 1. The statistical range includes the Chungli Factory, Lioudu Factory, Neihu Factory, and PDC.

- 2. The statistical standard of occupational injury does not include commuting accidents.
- 3. Recordable occupational injuries: workers who cannot continue their normal work due to an occupational injury must leave the workplace for more than 1 day, including deaths caused by occupational injury.
- 4. Total recordable injury frequency rate (TRIFR) = number of recordable occupational injuries × 200,000/total working hours (calculated to two decimal places, and not rounded).

#### Disability Frequency and Severity Rate Statistics of TTY Employees over the Recent 5 Years

Year	Number of Working Days Lost Due to Disability	Disabling Frequency Rate (FR)	Disabling Severity Rate (SR)	Frequency Severity Indicator (FSI)	Injury Type
2019	0	0.00	0.00	0.00	-
2020	24	1.69	20.27	0.19	Object collapse, crumble, fall
2021	6	1.74	5.23	0.10	Cut, slash, and abrasion
2022	0	0	0	0	-
2023	2	1.85	1.85	0.06	Collide

Note: 1. Number of lost working days: number of days unable to work (rest days). The calculation basis includes occupational accident injury leave, excluding sick leave and menstrual leave.

2. Disabling frequency rate (FR) = times of disabling injury × 1,000,000/total working hours (calculated to two decimal places, and not rounded). 3. Disabling severity rate (SR) = (days of disability damage loss × 1,000,000)/total experienced working hours (calculated to two decimal places,

and not rounded).

4. Frequency severity indicator, FSI = √ 【(FR×SR)÷1,000】

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5. Severe occupational injury: an occupational injury that results in death or from which the worker is unable to recover within 6 months.

6. Severe occupational injury frequency rate = number of severe occupational injuries × 200,000/total working hours (calculated to two decimal places, and not rounded).

7. The number of occupational injuries in the year 2023 was 0.

8. No occupational disease has occurred to a TTY contractor in the recent 5 years.

#### Health Promotion

#### Health Services

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Our employees receive orientation training, health services, medical assistance, and occupational illness prevention talks. We have arranged for onsite nurses to be available 3 times a month and professional doctors to provide consultations 3 times a year. This ensures easy access to professional medical help. The consultations cover a range of topics such as workload assessment and management, prevention of humanfactored hazards, maternal health, and workplace violence prevention

#### Health Examinations

TTY conducts regular health examinations for all employees every year, including general health examinations and special examinations for colleagues with a higher risk of occupational health problems. In the year 2023, a total of 104 employees underwent special physical examinations, and their health management classification was implemented according to the regulations. If the health examination results are about personnel above level 2 management, nurses and professional medical specialists will perform health education and health follow-up examinations, and, if necessary, on-site assessments of suspected work-related injuries may be conducted. No personnel above level 3 management and no abnormalities in physical examinations caused by special operations were detected this year.

#### Classification Results of Special Health Examinations for Each Factory in TTY in the year 2023

	Level	Health Examination Item	Number
		Specific chemical substance	33
1st Level	All findings normal, or part of the findings abnormal but deemed normal overall by physicians.	Dust	36
		Physical	28
		Specific chemical substance	19
2nd Level	Part or all findings are abnormal and deemed abnormal overall by physicians, but not work-related.	Dust	8
	ovoral by physiolars, but not work related.	Physical	8

Note: The total number of people undergoing special physical examinations is 104, and some colleagues have undergone physical examinations on 2 or more items

#### Promoting Health Information

In 2023, TTY promoted 6 health topics through email, including "Nine Symptoms to See If You Have a Damp Constitution", "Bridge Exercise Rescue the Corpulent Waist", "Fast Steaming for 5 Minutes to Retain the Most Nutrients", "Four Steps for A Full Relaxation of the Whole Body's Muscle and Vessel", "Shrinking the Abdomen to Stimulate the Spinal Bones", and "Three Cups of Tea with These Three Ingredients to Easily Cultivate Anti-inflammatory Constitution", to maintain the physical and mental health of our colleagues.

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## SOCIAL PARTICIPATION

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In the year 2023, these actions centered on the SDG themes of no poverty, good health and well-being, and quality education. TTY initiated a charity group purchase, financial aid to children of cancer patients, eco-friendly farming, hospice care, flu vaccines for ICDF and volunteers to conquer the virus, and many more actions with welfare organizations to seek more inclusive ways of taking care of our communities.

#### The Starting Point of TTY's Core Value and Culture of Public Welfare: Boshiyuan

In response to our corporate culture of " Be a civilized person", advocated by Chairman Lin Chuan, and in combination with the 17 SDGs of the United Nations, TTY colleagues established a charity club, Boshiyuan, to promote social services and environmental protection, and to bring the DNA of public welfare to daily life, imperceptibly mirroring TTY's culture so we can all work together for the world.

### Cultivating the DNA of Goodness, TTY Charity Actions

#### The Yu Cheng Social Welfare Foundation - Charity Purchase

Since 2019, TTY has cooperated with the Yu-Cheng Social Welfare Foundation, a legal entity to aid children with mental disabilities through practical actions. In recent years, due to the global COVID-19, TTY has adopted the charity group purchase method to actively respond to the Charity Yu Cheng group purchase to indirectly help cultivate the work skills, and ability to live independently and integrate with society of mentally handicapped children, improving their employability and increasing the job opportunities for them, creating more possibilities for their life and make 1. 411 them feel being encouraged.



In 2021, our colleagues spontaneously responded to the Mid-autumn Festival mooncake group purchase activity, and in 2022, the newly launched 4 tea-flavored popcorns also received high praise; At the beginning of 2023, we learned that the Yu Cheng Social Welfare Foundation had some orders being abandoned by other companies, resulting in a batch of dried fruits and nuts with an expiration date of July, which will cause losses for the foundation. TTY launched a charity group purchase activity and invited affiliated company TSH BIOPHARM to participate in the event, using the love of the employees to subscribe for a total of 942 packages of food, equivalent to approximately NTD\$98,026 in amount. In the same year, on the Mid-autumn Festival, we once again responded to the mooncake group purchase, hoping to do better and more widely in supporting public welfare activities for vulnerable groups!

TTY Health Information Promotion in the year 2023

Boshi's idea is to give generously; while Shiyuan is the homophonic sound of "siyuan", which means being grateful for the origins of things. It represents the heart of thinking of nature, helping those who are disadvantaged, and repaying to society what we take from it.

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#### Planting the Seeds of Hope: Providing Scholarships and Financial Aid to Children of Cancer Patients

According to statistics from the Ministry of Health and Welfare, patients suffering from certain cancers tend to be younger. The younger cancer population in Taiwan also means that most cancer patients are the economic pillar of their families, so treatment expenses are a particularly heavy burden on families and have an impact on children's lives and studies. To reduce the economic burden on families impacted by cancer, TTY has sponsored the Hope Foundation for Cancer Care since year 2010. This year offers 30 people and a scholarship of NTD\$20,000 for each student. Accumulated 13 years since the year 2011, learning subsidies have been given each year to a total of 540 children affected by cancer to help alleviate the financial burden so children can give their undivided attention to their learning. Every year we fund NTD\$1 million to support events that help cancer-affected college students learn under an equal, quality education system.

"Seeing the smiling faces of children is a great encouragement to us." In addition to providing scholarships to enable the children of patients with cancer to get some support in their studies and to reduce the economic burden of patients, TTY also supported the Hope Foundation for Cancer Care in launching the Planting a Seed of Hope project through practical action. Since the year 2016, we have hosted 24 sessions of Planting a Seed of Hope projects for 8 years - 598 people have joined to raise awareness - and provided care and companionship to children of cancer patients to help them through difficult times. Students exploring who they are can still find their position in life and develop their skills. Through listening and sharing, we can assist students who participate in the project to express their emotions, learn how to adjust, and provide substantive support to children of cancer patients.

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#### Yu Cheng Souvenirs to Shareholders

TTY has been supporting the Yu Cheng Foundation for several years. At the 2023 shareholder meeting, we continued the feedback activity that was well-received by shareholders last year and chose the Himalayan rose rock salt packaged by Yu Cheng mentally handicapped children as a souvenir. We ordered a total of 29,100 packages of rose rock salt, with a purchase amount of nearly NTD\$2.5 million. Through such actions, not only can non-profit organizations increase their product visibility, but we can also contribute our share to vulnerable groups in society.





#### "TTY Rice Project" Composed the Four Seasons Suite for Public Welfare

As the TTY Rice Project enters its 2nd year, it will continue to support friendly agriculture. Additionally, it has partnered with multiple social welfare groups to combine this blessing-carrying public welfare rice. Throughout the 4 quarters of 2023, various public welfare activities will be planned to stimulate the team's enthusiasm and foster connections, while continuously deepening the corporate culture of public welfare.

#### 1. The Fun of Agriculture in Early Spring

CEO Sara Hou believes that, as a pharmaceutical company, TTY should take on CSR from the point of health. TTY has been launching the "TTY Rice Project" since 2022. In the Daxi Rice Planting Area near the Chungli factory, small household farmers who agree with friendly farming methods were consulted to invest in pollution-free rice cultivation and support friendly agriculture through cooperative subscriptions.

In early spring 2023, the TTY volunteer team invited residents from the Happy Mount Foundation and the Chensenmei Social Welfare Foundation to participate in the TTY Field agricultural experience activity. In this field, residents can not only experience the joy of farming firsthand but also engage in agricultural education, experiencing the aroma of rice and the scent of soil. In addition to participating in agricultural work, residents can also engage in creative painting, dress

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up, and decorate scarecrows, which added a lot of joyful atmosphere to the entire event. Through this activity design, 2 social welfare organizations that had never met before were able to communicate with each other and establish friendships through joint participation.

"I will finish all my meals in the future." These were the words of a child from the Chensenmei Foundation who deeply experienced the hard work of farmers during the activity. He took the initiative to share this feeling with the teacher. This kind of experience will become an unforgettable memory for this group of mentally disabled people. To permanently commemorate this beauty, TTY further invited children from 5 organizations, including the Happy Mount Foundation, the Chensenmei Social Welfare Foundation, the Yu Cheng Social Welfare Foundation, the Andrew Charity Association, and the Hope Foundation for Cancer Care, to participate and collect their paintings about the activities and rural scenery during the day's event, to permanently preserve this beautiful moment.







#### 2. Summer Online Art Exhibition Combining Creation and Institution to Create Love Gift Box

The artworks of the children who participated in the painting invitation are amazing, each painting contains special emotions and memories. Some children recall the happy moments of childhood, while others show a warm affection for their mother, and each stroke seems to tell a unique story from the soul. To let more people feel this emotion, "TTY Rice Project" has launched an online art exhibition this year, allowing the beauty of spring to be transmitted through the internet to the passionate summer.

In addition, TTY further collaborated with the Yu Cheng Social Welfare Foundation to select multiple masterpieces from numerous works and print them on paper tapes on the covers and introduction cards for Mid-autumn Festival gift boxes. When children and parents learned that their work was selected to be printed on the annual public welfare packaging, they were extremely happy to share their joy on Facebook, saying, "Great! I will support it!" This not only supports public welfare activities but also motivates them to actively invest in the art field.

TTY's volunteers also participated in the activities of the Yu Cheng Social Welfare Foundation, working together at the Shelter Workshop in Wugu to complete the packaging of Midautumn Festival gift boxes. This gift box not only features children's paintings in the fields on the exterior but also contains the "TTY Rice" jointly produced by TTY volunteers and their mentally disabled partners, embodying their care and warmth. CEO, Sara Hou, was so moved and said, "This was originally a public welfare activity to deepen volunteer culture, but I didn't expect it to carry so much new hope, making the team feel so happy and fulfilled."

#### 3. Autumn Public Welfare, Seeing the Needs of Happy Mount Foundation

Pollution-free rice not only demonstrates TTY's support for a friendly environment but also becomes another action force for TTY volunteers to uphold the principle of "connecting beautiful moments" and invests in public welfare. In September, TTY volunteers were called upon to provide companionship services at the Happy Mount Foundation, which is developing art therapy. The volunteer team transformed into angels, following the guidance of the on-site teacher, holding the hands of the residents, or pushing their wheelchairs to go to the church to gather. When the residents were dancing and performing on stage, the volunteers also beat the time and happily held their hands to dance together. The scene was lively and warm.

In addition, the TTY volunteer team also collaborated with Happy Mount Foundation partners to plan courses on grasslands. The TTY volunteer team first discussed the course content with the foundation and considered the needs of students with different disabilities. They planned a yoga ball rolling competition and bubble-blowing activity so that every child who thinks of outdoor activities can have corresponding and suitable companionship methods. When they became tired of playing, they invited the residents to taste the egg cake made of rice specially prepared by the volunteers, and together they enjoyed a fitness class full of energy, both physically and mentally. 4. The Theme of Winter Food and Agriculture Education Conveys Health Concepts Through Art

The "Winter Sun - Public Welfare Food and Agriculture Painting Exhibition" brings together friends of all ages from the Yu Cheng Social Welfare Foundation, Happy Mount Foundation, Andrew Charity Association, and Hope Foundation for Cancer Care. They use the public field in Taoyuan Daxi as the theme and present lively and vivid food and agriculture education paintings through their brushes.

TTY collaborated with the Hion House in Taichung to highlight physical art exhibitions and combine them with educational picture books on food and agriculture, creating a fun theme that combines education with entertainment. Through art and culture, TTY conveys the importance of food and agriculture and gratitude for nature, making this event not only an artistic display but also an injection and manifestation of social value.

TTY is not only a biotech pharmaceutical company, but also a people-oriented and socially responsible enterprise. This exhibition combines corporate culture with a social mission, hoping to present a social environment full of love and positive energy. We hope that different positive energies in society can connect, spreading warmth and bringing more enthusiasm.

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5. Donating Public Welfare Pollution-free Rice to Carry Health and Share Love

Charitable deeds are not impacted by their small scale or few people participating, as long as we put our strength together, we can always move forward! TTY has invested in the "TTY Rice Project". Although it is based on the intention of supporting a sustainable environment, it has expanded its positive influence through connections with employees and public welfare organizations. It can not only deliver goods to families in need but also deepen the DNA of the company's ESG culture in the process of service.

In 2023, TTY continued its partnership with the Yu Cheng Social Welfare Foundation, a foundation that provides longterm care for people with physical and mental disabilities. They also collaborated with the Andrew Charity Association, a social organization that specifically cares for disadvantaged children, by donating 1000 kilograms of TTY pollution-free rice. Additionally, TTY extended its support to the Happy Mount Foundation, which provides long-term care for the life and development of mentally handicapped children, by donating 500 kilograms of TTY pollution-free rice in the 1st and 2nd half of the year to provide meals for the institution.

In addition to donating to social welfare institutions, TTY also further collaborates with the public sector to contribute to the public welfare to fulfill its local corporate social responsibility. In 2023, we donated 500 packages of 1000 kilograms of pollutionfree rice to the Department of Social Welfare, Taoyuan. Through the department's food bank, we reached out to families in need; with public-private cooperation, we aimed to make Taoyuan a happier city. Not only in Taoyuan but also in response to the call for love from Taiwan Power Company in Keelung District, providing public welfare pollution-free rice and encouraging the public to donate blood and contribute love.



#### Promote the Access of Medicine for the Unmet needs of Community

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e applications and follow up on each step of the process to ts authorization are introduced to the market.

Before licensed-in or authorized drugs, we review the top 10 advanced countries' prices and medical technology reports to simulate the financial impact when bringing the new drug under NHI coverage, locating a reasonable and affordable NHI price.

agement optimal localization throughout each of the targeted

wan's National Health Insurance drug coverage program.

vas shipped in the first quarter of 2023 and sold in the United

ne International Cooperation and Development Foundation to a vaccine to assist foreign aid personnel in fighting against the

e Department of Public Health, Taoyuan to provide 500 doses nee the protection of environmental protection, hygiene, and

the China Medical University Hospital to provide adjuvant protection of community elders, elderly from disadvantaged powever, due to the lack of actual demand from these units,



#### Donating Influenza Vaccines to Support Diplomacy

TTY's ESG health public welfare program, which promotes the donation of cellular influenza vaccines, has entered its 3rd year. Considering that Taiwan has always been an important force in international aid, TTY donated cellular influenza vaccines to the International Cooperation and Development Fund (ICDF) in 2023, to provide precise protection for the health of diplomatic substitute servicemen and volunteers who are about to serve overseas.

Diplomatic substitute military service plays the role of a bridge between Taiwan and friendly countries on the international stage, serving as our loving diplomatic soldiers to the world. To ensure that these young talents dedicated to national diplomacy can fulfill their missions healthily and safely, TTY has donated influenza vaccines to ICDF for diplomatic substitute military servicemen to be vaccinated, hoping that they can achieve their tasks with vitality and happiness around the world!

The Journal of the Infectious Diseases Society of America, IDSA confirms that the protective effect of the cellular influenza vaccine against influenza-like diseases is 36.2% higher than that of the chicken embryo influenza vaccine. The CDC in the United States and the Committee on Vaccination in the United Kingdom (JCVI) have also suggested that people should prioritize the use of the cellular influenza vaccine. TTY takes fulfilling corporate social responsibility as its starting point, and to provide better protection for foreign-aid teams, in addition to calling on society to attach importance to influenza prevention, it also assists the International Cooperation and Development Fund's foreign-aid personnel in receiving public welfare cellular flu vaccines. We hope to practice the altruistic mission of caring for the health of more people in different dimensions through the public welfare action of donating cellular flu vaccines

#### With You Until the End: TTY and Hospice Care



The spiritual support of patients and their caregivers plays a key role in health care. Although Taiwan has been promoting hospice care for many years, there are still many misunderstandings among the public about it. To help promote hospice care in Taiwan and give full play to its advantages, TTY has taken the initiative to launch hospice care services and has cooperated with the China Medical University Hospital to plan the daytime hospice care program, to provide hospice care and palliative medical services for the patients after returning home, and the hospice specialist and nurse will visit the patients at home and implement the palliative care, helping solve the problems related to family care and reduce the caregiver's stress.

Over the past 2 years, despite the ongoing challenges posed by COVID-19, we have remained committed to our mission of caring for people. Between 2021 and 2022, we implemented several plans, resulting in our ability to provide hospice care services to 148 patients in their own homes by 2023. Over the past 3 years, we have served a total of 969 patients and covered the costs that would normally be the responsibility of the families receiving hospice services. Our goal is to provide comprehensive services to patients and their families, including symptom relief, emotional support, and financial assistance. We aim to ensure that patients and their families can approach the end of life with peace of mind and a sense of calm, allowing us to further demonstrate the positive impact that our organization can have on the world.

#### Promoting Medical Education

Industry-university Cooperation:

A QUALITY

TTY has been actively involved in developing local talent in the biotech industry. Since 2008, TTY has offered a Summer Internship Program (SIP) for 16 consecutive years, as well as organized numerous seminars, video interviews, course content planning, and project management workshops for undergraduate and graduate students from universities specializing in pharmacy and bioscience across Taiwan. TTY, as an international pharmaceutical company, provides industry experience and insights into aspects of the industry that cannot be learned in the classroom. In the last 16 years, 417 students have benefited from our program.

In 2023, we developed the "Strength Plan" aimed at cultivating the soft and hard power of our company and making it a future leader in the pharmaceutical industry. The plan is divided into 3 stages. In the first stage, we encourage enthusiastic participation in our Summer Internship Program (SIP). During the internship, we select outstanding individuals with a passion for TTY to enter the second stage, where they serve as campus ambassadors. Through various projects and employer branding, we explore and identify promising individuals who are interested in long-term development in our company. These individuals are finally offered employment with us. To match the plan's admission threshold, we also

#### **Overview of TTY's SIP in the Recent 3 Years**

	/ear	Participant	Internship Unit	Internship Content
2	2023	26	Sales	
2	2022	28	Marketing R&D	Course learning Unit internship
2	2021	24	Manufacturing Clinical	Team entrepreneurship competition
2	2020	26	Regulatory Affairs	Demonstration of learning result
2	2019	27	Property	

#### Feedback from interns

- 1. After the entire internship, I gained a preliminary understanding of the various units in the pharmaceutical industry chain. Thank you very much, TTY, for helping me better determine my life path. TTY No.1!
- 2. Entrepreneurship competition is a great activity to bring team members closer and achieve mutual understanding! I like the advice given by the senior marketing reviewers. I hope that if there are any entrepreneurship competitions in the future, the junior fellow students can invite more senior students in related fields to listen to the lecture.
- 3. The summer internship plan is really solid and fully meets what I wanted to explore when I first came here. Through this plan, I began to understand the needs of clients in business, so that I can empathize with them with each position in future work.

conduct an "entrepreneurship competition" to simulate the establishment of a new biotech company. Participants can set up the company's vision, mission, strategy, etc. during this process. They learn about the overall market operation mode and market demand of the biotech industry and cultivate themselves with business thinking.

A total of 26 students from National Taiwan University, Taipei Medical University, National Yang-Ming Chiao-Tung University, National Tsing Hua University, National Defense Medical Center, China Medical University, National Cheng Kung University, Chia Nan University of Pharmacy & Science, Kao Hsiung Medical University, etc., participated in the summer internship program. In 2023, students with excellent internship performance were selected as campus ambassadors, we also hope that more talents will be discovered in the future and join TTY as fresh blood.

#### Results

- 3 served as the 2nd session campus ambassadors
- 1 SIP learner of the year 2017 + (winter vacation work-study) on duty
- 3 served as the 2nd session campus ambassadors
- 1 SIP learner of the year 2022 working in TTY
- 1 SIP learner of the year 2017 working in  $\ensuremath{\mathsf{TTY}}$
- 3 served as the 2nd session campus ambassadors
- 1 served as a short-term intern after the SIP
- 1 served as the 1st session campus ambassador
- 1 worked in TTY after graduation
- 1 worked in an affiliated corporation of TTY

#### TTY Campus Ambassador

With the increase in online communities and digital media, TTY held the 3rd Campus Ambassador program in the year 2023. Through campus activities, students' creativity and unlimited potential were stimulated, and students were allowed to take practical action. They served as "TTY's little helpers" on campus and implemented their ideas online so more students could get to know TTY and have the opportunity to work in TTY in the future.

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In 2023, TTY selected 3 outstanding interns through the Summer Internship Program (SIP) to the Campus Ambassador Program, were students from National Yang-Ming Chiao-Tung University, China Medical University, and National Cheng Kung University. TTY promoted this on the TTY digital platform, with a total of 27 articles and 2 job interviews, along with redesigned layouts, successfully attracting hundreds of students to join the platform, and receiving a total of 1680 likes. This allowed more students to further understand the company, bridge the gap with domestic students, and enhance their brand identity with TTY. It improved the 2nd stage of the "Strength Plan" and explored potential talents who are interested in joining the long-term development of the company.

### Experience of TTY's 1st session of campus ambassadors:

In addition to my internship, I also highly recommend being a campus ambassador of TTY because the company provides opportunities for campus ambassadors to interact with employees, allowing us to personally talk to current employees. Listening to seniors talk about work conditions and content makes me less afraid of the workplace, especially when I learned about their emotional journey when they first joined the company. From knowing nothing at the beginning to facing all the challenges at the workplace, they have given me many suggestions, making me increasingly confirmed about my life. Among all the questions, the one I ask the most is whether what I have learned in school is something that will be useful in future work. Many senior colleagues told me that basic knowledge in school is like a foundation, which needs to be firmly established before other skills are added to it. While working, I was also learning at the same time. After listening to their suggestions, I felt that I was no longer confused about the future. At this stage, what I need to do is to study hard and lay a solid foundation, and use some extracurricular activities to explore myself.

Every month, we have certain goals to achieve such as reaching a certain rate of post-engagement and increasing the effectiveness of our lottery activities. We also schedule a monthly meeting to discuss whether we've met our goals and how we can improve for the next month. This feeling was like having a meeting with my boss to report work progress, allowing me to become a master of workplace time management early on! Through this experience, I not only gained an understanding of marketing activities but also learned how to function as a bridge between the campus and the company. Otherwise, making mistakes after leaving school to work may be too late.



#### **Cancer Prevention Education**

TTY, a major cancer pharmaceuticals manufacturer in Taiwan, has been actively involved in cancer prevention education for several years. Their objective is to help people in Taiwan gain better knowledge about cancer and related illnesses. TTY conducts cancer education programs in 3 key areas, namely "Regional care for the cancer-affected", "Health education", and "Love and care painting competition". These sessions benefit people across Taiwan, including the general public, cancer patients, and their families. By attending these sessions, they can learn more about cancer, overcome their fear, and demonstrate more empathy and understanding towards cancer patients.

#### 1. Regional Care for the Cancer-affected

Since 2005, TTY's TOT has cooperated with cancer-related non-profit organizations to hold a series of cancer prevention health education and publicity activities in rural areas, and has invited medical staff from major medical centers as lecturers to promote cancer prevention and publicity on campus and contribute to cancer prevention initiatives. Cancer awareness continues in towns and villages. This year (2023), we worked with 41 junior high schools in Yunlin-Chiayi-Tainan, Miaoli, Hualien-Taitung, and off-shore islands, and empowered young students with preventive thinking, so that family members can learn more about cancer, and how to lead as healthy life as possible.

#### 2. Health Education

TTY organizes lectures on disease treatment trends and nutrition education campaigns for cancer patients and their families in collaboration with nonprofit organizations that work toward cancer awareness. These lectures help patients to alleviate the discomfort caused by cancer treatment and disease, and also educate their families with the correct knowledge so that they can support the patients in fighting against cancer. In 2023, 3 physical lectures were held, with a total of 160 participants. Since 2009, a total of 6,871 cancer patients and their families have participated in the lectures. Additionally, TTY also held health education lectures on osteoporosis and bone health. These lectures provided public testing to prevent the causes of calcium and vitamin D deficiency. In 2023, 29 sessions were held, with 27 physicians serving as the main speakers of health education, patient associations, etc.). These physicians guided and advised attendees on how to achieve sufficient calcium intake from diet and daily life, with a total of 2,930 participants.

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#### 3. Love and Care Painting Competition

TTY actively collaborates with non-profit organizations related to cancer to deepen awareness of cancer and promote healthy living in Taiwan. In 2023, we held the 11th "Love and Care for Children Painting Competition", aiming to deepen children's understanding of cancer through painting. To complete the work, students actively sought information, explored how to maintain physical health, and provided encouragement to cancer patients and their family members. Every work contained power and inspiration, transmitting positive energy to every corner of society.

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## TTY SUSTAINABILITY REPORT RECEIVED THE TCSA GOLD AWARD

Since 2018, TTY has been at the forefront of responding to the trend of Sustainability Reports in Europe and the United States with its corporate social responsibility report. The report has been prepared with the 3 ESG main axes of environmental protection, social care, and corporate governance, and has been in line with international norms over the years. TTY has continuously adjusted and improved the report to ensure that stakeholders can further understand the organization's sustainable business strategy and establish good and effective communication channels.

TTY has participated in multiple times of the TCSA, and the 2021 Sustainability Report of TTY won the highest honor, the platinum award, in the second category of healthcare enterprises; In 2022, due to the growth of the organization with an annual revenue of over NTD\$5 billion, we applied for the first time to participate in the first category of healthcare enterprises. Despite fierce competition, we still won the gold award in the report of the 16th TCSA in 2023. We will continue to improve based on this experience and hope to achieve more complete and transparent ESG information disclosure.

The ESG values at TTY are not just a catchy phrase but a set of principles that guide our actions daily. We expect all TTY employees to adhere to these values and work towards achieving our vision of improving the quality of human life through scientific innovation. We believe that by being civilized and collaborative, we can make a meaningful difference in the world.

The 2022 TTY sustainability report received by the 16th TCSA Gold Award

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## **APPENDIX**

#### Statement of Independent Assurance Opinion

#### The 2023 Sustainability Report is Verified by Afnor Asia

TTY's 2023 sustainability report passed the third-party independent verification conducted by institution Afnor Asia according to AA1000AS V3 first application type (type 1) and moderate assurance verification standards. External assurance is provided for the information disclosed in the report, and the independent assurance opinion statement issued by Afnor Asia confirms that this report correctly presents and conveys TTY's 2023 economic, social, and environmental performance information. In year 2024, TTY conducted the 2023 ISO 14064-1 GHG emissions, and passed the third-party independent assurance opinion issued by DNV Business Assurance.

#### TTY 2023 Sustainability Report Receives Independent Assurance Statement from Afnor Asia



- Statement of Independent Assurance Opinion
- Index Table of GRI Sustainability Report Standards
- SASB Chart
- UNGC Chart
- Climate-related Information of TWSE/TPEx Listed Company



The Greenhouse Gas Inventory Result for TTY 2023 Has

# INDEX TABLE OF THE GRI SUSTAINABILITY REPORT STANDARDS

### General Disclosure

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Use Statement The content of the report period of 1/1/2023 to 31/12/2023 followed the GRI Standards

GRI 1 Application	GRI 1: Foundation 2021

GRI No.	Disclosure Item	Chapter & Page
	GRI 2: 2021 General Disc	losure
GRI 2-1	Organizational details	P.004 About TTY Sustainability Report P.032 About TTY Biopharm
GRI 2-2	Entities included in the organization's sustainability reporting	P.004 About TTY Sustainability Report
GRI 2-3	Reporting period, frequency and contact	P.004 About TTY Sustainability Report
GRI 2-4	Restatements of information	P.014 ESG Performance and Goals P.113 GHG Emission Statistics P.036 Market Overview
GRI 2-5	External guarantee / Confirmation	P.004 About TTY Sustainability Report
GRI 2-6	Activities, value chain and other business relationships	P.046 Pharmaceutical Industry Value Chain
GRI 2-7	Employee	P.126 Diversity in the Workplace
GRI 2-8	Non-employees workers	P.126 Diversity in the Workplace
GRI 2-9	Governance structure and composition	P.073 Diversity and Professionalism of the Board of Directors
GRI 2-10	Nomination and selection of the highest governance unit	P.075 Nomination and Selection of Board Members
GRI 2-11	Chair of the highest governance unit	P.075 Nomination and Selection of Board Members
GRI 2-12	Role of the highest governance unit in overseeing the management of impacts	P.082 Functional Committees P.089 Risk Management
GRI 2-13	Delegation of responsibility for managing impact	P.082 Functional Committees P.083 Promote Corporate Sustainability Development P.089 Risk Management
GRI 2-14	Role of the highest governance unit in sustainability reporting	P.004 About TTY Sustainability Report

GRI No.	Disclosure Item	Chapter & Page
	GRI 2: 2021 General Disc	losure
GRI 2-15	Conflicts of interest	P.076 Interest Avoidance
GRI 2-16	Communication of material concerns	P.075 Board Meeting Resolution
GRI 2-17	Collective knowledge of the highest governance unit	P.077 Enhancing Directors' Knowledge
GRI 2-18	Evaluation of the performance of the highest governance unit	P.076 Board Performance Evaluation
GRI 2-19	Remuneration policies	P.082 Remuneration Committee
GRI 2-20	Process to determine remuneration	P.082 Remuneration Committee
GRI 2-21	Annual total compensation ratio	P.130 Remuneration Structure
GRI 2-22	Statement on the sustainable development strategy	<ul> <li>P.002 Letter from the Chairman</li> <li>P.010 Sustainable Development Strategies and Performance</li> <li>P.083 Promote Corporate Sustainability Development</li> </ul>
GRI 2-23	Policy commitments	P.083 Governance Principles P.128 Protecting Employee Rights
GRI 2-24	Embedding policy commitments	P.083 Promote Corporate Sustainability Development
GRI 2-25	Processes to remediate negative impacts	P.087 Complaints and Suggestions Channel
GRI 2-26	Mechanisms for seeking advice and raising concerns	P.087 Complaints and Suggestions Channel
GRI 2-27	Regulatory compliance	P.087 Regulatory Compliance
GRI 2-28	Membership to associations	P.037 External Engagement
GRI 2-29	guidelines to stakeholder engagement	P.023 Stakeholder Engagement
GRI 2-30	Group agreements	P.128 Harmonizing Labor-employer Relations

### Material Topic Disclosure

GRI No.	Disclosure Item	Chapter & Page
	GRI 3: 2021 Material Topic	
GRI 3-1	Procedure to determine material topics	P.022 Sustainability Topics of Concern Analyzed
GRI 3-2	Material topic list	P.027 Material Topics Identification

Disclosure Item No.	Disclosure Item Topics	Chapter & Page
	1. Economic Performance	
GRI 3-3	Material topic management	P.032 About TTY Biopharm
GRI 201-1	Direct economic value generated and distributed by the organization	P.033 Operation Result
GRI 201-2	Financial implications and other risks and opportunities due to climate change	P.103 Climate-Related Risks, Opportunities, and Financial Impacts
GRI 201-3	Defined benefit plan obligations and other retirement plans	P.130 Employee Benefits (Please refer to Annual Report)
	2. Talent Attraction and Retenti	on
GRI 3-3	Material topic management	P.124 Workplace Happiness
GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage	P.130 Remuneration Structure
GRI 401-1	New and departed employees	P.126 Diversity in the workplace
GRI 401-2	Benefits provided to full-time employees (excluding temporary or part-time employees)	P.130 Employee Benefits
GRI 401-3	Parental leave	P.129 Maternity Health Protection
	3. Access to Medicine	

P.148 Promote the Access of Medicine for the Unmet needs of the Community

		4. Sustainable Development Strategy
GRI 3-3	Material topic management	P.010 Sustainability Development Strategies and Performance
		5. Counterfeit Drugs
GRI 3-3	Material topic management	P.059 Supply Chain Traceability

Disclosure Item No.	Disclosure Item Topics	Chapter & Page
	6. Ethical Management	
GRI 3-3	Material topic management	P.085 Ethical Management
GRI 205-1	Operations assessed for risks related to corruption	P.086 Principles of Procedures for Ethical Management
GRI 205-2	Communication and training on anti-corruption policies and procedures	P.086 Ethical Management Education and Training
GRI 205-3	Confirmed incidents of corruption and actions taken	P.085 Ethical Management
	7. Drug Safety	
GRI 3-3	Material topic management	P.056 Drug Safety
GRI 416-1	Assessing the health and safety of product and service categories	P.056 Drug Safety
GRI 416-2	Violation of health and safety regulations related to products and services	P.056 Drug Safety
	8. Subject Safety	
GRI 3-3	Material topic management	P.062 Subject Safety
	9. Reasonable Pricing	
GRI 3-3	Material topic management	P.068 Reasonable Pricing
	10. Supplier Management	
GRI 3-3	Material topic management	P.048 Supplier Screening and Management
GRI 308-1	New suppliers that were screened using environmental criteria	P.048 Supplier Screening and Management
GRI 308-2	Negative environmental impacts in the supply chain and actions taken	P.048 Supplier Screening and Management (No related matters)
GRI 414-1	New suppliers that were screened using social criteria	P.048 Supplier Screening and Management
GRI 414-2	Negative social impacts in the supply chain and actions taken	P.048 Supplier Screening and Management (No related matters)
	11. Marketing Ethics	
GRI 3-3	Material topic management	P.066 Marketing Regulations
GRI 417-1	Requirements for information and labeling of product and service	P.066 Marketing Regulations
GRI 417-2	Failure to comply with laws and regulations regarding information and labeling of products and services	P.066 Marketing Regulations (No related matters)
GRI 417-3	Failure to comply with marketing communications regulations	P.066 Marketing Regulations (No related matters)

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GRI 3-3

Material topic management

# SUSTAINABILITY ACCOUNTING STANDARDS CHART

SASB Biotechnology and Pharmaceutical Industry Disclosure Guidelines

No.	Accounting Standards	Category	Disclosure Item	Relevant Chapters
	То	pic: Safety of p	articipants in clinical trials	
HC-BP-210a.1	To study the management process to ensure the quality of care and patient safety according to different regions of the world	Discussion and Analysis	TTY adopts the highest standards of management for ensuring medical quality and patient safety, and each business unit conducts clinical trials in accordance with domestic regulations such as the Good Clinical Trial Practice Guidelines for Pharmaceuticals. In human research and clinical trials of cancer drugs, in addition to complying with relevant domestic and foreign laws and regulations (such as ICH E6, human research law, etc.), they must be approved by the ethics committee of the testing institution and the local health authority, and implemented in accordance with the standard operating procedures of the medical academic division.	Chapter 3 Supply Chain Management > Subject Safety
HC-BP-210a.2	For clinical trial management and drug active surveillance- related FDA audit items and quantities, the following approaches can be taken: (1) Voluntary Active Initiative (VAI) (2) Official Active Initiative (OAI)	Quantitative	In 2023, 1 clinical trial sponsored by TTY was audited by the competent authority, the TFDA GCP, and the result was NAI (no action indicated); There are 0 cases of drug safety monitoring and verification.	-
HC-BP-210a.3	Total financial losses from legal proceedings related to clinical trials of drugs in developing countries	Quantitative	NTD 0; There were no relevant losses to report in TTY in year 2023.	-

No.	Accounting Standards	Category	Disclosure Item	Relevant Chapters
		Topic: Ac	ccess to medicine	
HC-BP-240a.1	The measures and initiatives to promote the use of healthcare products for diseases requiring priority prevention and treatment and countries with relatively underdeveloped medical and health conditions (as defined in the drug licensing index) is described in detail	Discussion and Analysis	TTY introduced trivalent and tetravalent influenza vaccines and obtained relevant certificates issued by the competent authority. Note: the drug license was obtained on 6/4/2017 and 20/3/2020 and 7/2/2023.	Chapter 6 Social > Promote the Access of Medicine for the Unmet needs of the community
HC-BP-240a.2	As a product on the PQP list of pre-qualified medicines	Discussion and Analysis	Taiwan is not a member of the World Health Organization (WHO), and TTY does not hold products related to the WHO PQP.	-
	Та	opic: Reasonat	le pricing for the masses	
HC-BP-240b.1	The number of lawsuits related to ANDA procedures related to disbursements or the specified period of delay in the listing of generic drugs	Quantitative	No related lawsuits.	-
HC-BP-240b.2	Percentage change in (1) average pricing and (2) average net price of the drug portfolio compared to the same period last year	Quantitative	Average pricing change ratio: -10.62%~0% Average net price change ratio: -13.43%~7.48% Please refer to the corresponding chapter for detailed explanations of drug combinations and price changes.	Chapter 3 Supply Chair Management > Reasonable Pricing
HC-BP-240b.3	Percentage change: (1) pricing and (2) net price of products with the largest increase compared with the same period of the previous year	Quantitative	The current pricing of drugs sold by TTY 's BUs is the same as that in the same period of the previous year.	Chapter 3 Supply Chair Management > Reasonable Pricing

#### APPENDIX

No.	Accounting Standards	Category	Disclosure Item	Relevant Chapters
		Торі	c: Drug safety	
C-BP-250a.1	List of products listed in the U.S. Food and Drug Administration's (FDA) MedWatch Notification System's Human Medical Product Safety Alert Database	Discussion and Analysis	There are no relevant circumstances with the scope required by the FDA. Adverse drug reactions of TTY are reported by the drug safety window of each BU. In 2023, cases reported to the adverse drug reaction notification system of the Taiwan Food and Drug Administration (TFDA) included Lipo-DOX, UFUR, TS- 1, Pemazyre, Thado, Gemmis and Yondelis of the Oncology BU; Brosym of the Intensive Care BU; and Algitab and Flucelvax Quad of the Healthcare BU. All the cases reported above do not involve any change in product safety information, and were reported in accordance with TFDA regulations.	Chapter 3 Supply Chain Management > Drug Safety
BP-250a.2	Number of deaths related to products in the FDA adverse drug reaction notification system	Quantitative	There are no relevant circumstances for the parts required by the FDA. In the TFDA adverse drug reaction reporting system, the number of deaths related to our products in the Intensive Care BU is zero. The death toll of the Healthcare BU is zero, and the death toll of products related to the Oncology BU is 1 (using Yondelis+Lipo Dox in combination); the causal relationship between cancer deaths and medication is not absolutely clear.	-
3P-250a.3	The number of recalls issued in accordance with FDA regulations and the total number of units recalled	Quantitative	There are no relevant matters regarding the requirements of the FDA and TFDA.	-
BP-250a.4	The total amount of products accepted for recycling, reuse, or disposal	Quantitative	The total number of products recovered due to expiration in 2023 is 319 vials and 946 capsules. The recovery of defective products is 264 vials and 210 tablets. The recycling and treatment methods are all for disposal; there is no possibility of reuse. Note: Due to different recycling specifications, it is	-
			difficult to calculate weight, and registration is based on quantity statistics.	
C-BP-250a.5	The number of cases by type to which FDA- enforced measures apply for	Quantitative	There are no relevant matters regarding the	
	violations of current Good Manufacturing Practices (cGMP)		requirements of the FDA and TFDA.	

No.	Accounting Standards	Category		Disclosure Item		Relevant Chapters
	Topic: Err	nployee recruiti	ment, developmen	t and retention		
			In talent recruitment through the SIP program or industry university cooperation R&D projects, TTY enables students in chemistry-related departments to further understand and experience specialties and the future development of pharmaceutical R&D to			Chapter 6 Social >
HC-BP-330a.1	Explore the recruitment and retention of scientists and R&D personnel	Discussion and Analysis	attract talent. In a with R&D personn companies throug platforms, and pre- motivate exception work in the indust TTY provides a fr environment to m R&D personnel ca retain talent. In ac integration and le	ddition, TTY conta nel of overseas ph gh LinkedIn and of ovides job vacanc anal talent to return try. iendly and flexible eet the needs of F an focus on their v ddition, TTY gives adership abilities t eaders in R&D pro	acts and interacts harmaceutical ther related by information to in to Taiwan to working R&D projects so work and help colleagues with the opportunity to bjects so they can	to Human Resource Structure D to Industry- university Cooperation: Committed to Training Domestic With Medical Talents can t. es, all Chapter 6 Socials
					development.	
	<ul> <li>(1) Voluntary departure rate</li> <li>(2) involuntary departure rate: <ul> <li>(a) senior managers,</li> <li>(b) middle-level managers,</li> <li>(c) professionals</li> <li>(d) others</li> </ul> </li> </ul>	Quantitative	By the end of year 2023, the total number of employees was 508, including 82 new employees, accounting for 16.14% of all employees; 99 employees resigned, accounting for 19.49% of all employees.			
HC-BP-330a.2			2023 Senior managers Middle-level	Voluntary resignation 5	Involuntary resignation 0	
			managers	16	0	
			Professionals	72	6	
		Topic: Sup	oplier management	t		
HC-BP-430a.1	Confirm the (1) physical facilities and (2) percentage of primary supplier facilities for those participating in the Rx-360 international pharmaceutical supply chain alliance review plan or equivalent third-party review plan to ensure supply chain quality and drug ingredient integrity	Quantitative	conduct a written every year or ever SOP. The factory has e continuous monit for qualified raw n	ry 3 years accordii stablished an app oring and assessr	r review plan ng to the in-plant opriate hent system o ensure the Chapter 3 Supply Chain Management Screening and Management	

## **UNGC CHART**

	Principles	TTY Practice	Relevant Chapters	Principles	TTY Practice	Relevant Chapter
Human Rights	Principle 1: Enterprises should support and respect internationally recognized human rights	TTY adheres to internationally recognized human rights standards, such as the International Labor Organization's Declaration of Fundamental Principles and Rights at Work, the Universal Declaration of Human Rights, the 10 Principles of the United Nations Global Compact, and the United Nations Guiding Principles on Business and Human Rights, and also complies with local government labor laws and regulations to establish corporate human rights policies to protect the rights of employees.	Protecting Employment Rights	Principle 7: Enterprises should support the adoption of preventive measures to cope with environmental challenges	To mitigate the impact of climate change and cope with increasingly stringent temperature management regulations, TTY currently participates in the TCFD specification, preliminarily completing the identification of climate change related risks and opportunities, is planning specific response strategies according to the risk identification results, and strengthening information disclosure of climate-related risks and opportunities. To improve disaster response capabilities, TTY has actively developed new suppliers to ensure a second or even third source of raw materials, and has implemented a supplier sustainability management mechanism.	Responses to Climate Change
	Principle 2: Enterprises should ensure that they are not involved in human rights violations	The company has not received any employee appeal cases. We will continue to strengthen the communication and management abilities of our supervisors to avoid such situations from occurring.	Protecting Employment Rights	Principle 8: Take initiative to promote and strengthen corporate environmental	TTY is committed to improving the utilization efficiency of water resources, creating a water resources circulation system, recycling water resources of the cooling tower, improving the cooling process, and increasing the heat recovery rate to reduce demand for water	Water Management
	Principle 3: Enterprises should support the freedom of labor association and recognize the right to collective bargaining	ireedom of ation and e right toare composed of senior executives and colleagues from various departments. Meetings are held every 3 months to discuss issues such as the revision of labor conditions.Harmonizing Labor-employ Relations	Labor-employer	responsibility Principle 9: Encourage the development and promotion of environmentally friendly	TTY adopts source classification and multi-sections effective treatment technology in the 2 manufacturing sites of Lioudu and Chungli factories to reduce air pollution caused by operating processes. The pollutant content discharged by the Company into the atmosphere is	Air Pollution Control
Labor	Principle 4: Elimination of all forms of compulsory labor	TTY prohibits all forced labor practices, and there are no cases of forced labor at the Company.	Protecting Employment Rights	technologies	far lower than local regulation requirements. To establish a corporate culture of ethical management, TTY applies the "Principles of Procedures for Ethical Management" and "Procedures for Ethical Management and Guidelines for Conduct", specifically regulates matters that employees should pay attention to when performing their roles, and clearly prescribes preventive measures to various dishonest behavior. It is strictly prohibited for dispetare menagers and employees in any bibary or illegel	
	Principle 5: The definitive abolition of child labor	TTY prohibits child labor that does not meet the legal minimum age and does not use child labor within the Company.	Protecting Employment Rights			or Ethical
	Principle 6: Elimination of discrimination in employment and occupation	TTY actively strives for workplace diversity. In the recent 5 years, the proportion of female employees has remained stable at more than 50%, and 48.33% of women hold key leadership positions above manager level, ensuring that employees are not discriminated against or treated unfairly due to gender, race, age, marital status, religion, political position, etc.	Diversity in the Workplace	Anti-corruption Enterprises should strive against all forms of corruption, including extortion and bribery	<ul> <li>directors, managers, and employees to engage in any bribery or illegal behavior, and TTY is committed to minimizing the risk of violating honest practices.</li> <li>The Ethical Management Promotion Center under the Board of Directors publicizes the ethical management policy through internal announcements, regularly provides relevant education and training for all colleagues, and at least once a year publicizes relevant laws and regulations on preventing insider trading for directors, managers, and</li> </ul>	
					<ul> <li>employees.</li> <li>To eliminate insider trading, the Internal Material Information Process Procedure was reviewed and renamed on 24/12/2021 by the board to the Internal Material Information Process and Insider Trading Management Procedure to strictly and explicitly regulate insider trading.</li> <li>In 2023, a total of 1 online course on corporate ethical management</li> </ul>	
					and 1 physical course were held to educate colleagues on the interests and types of dishonest behavior, emphasizing the reporting system and reward and punishment regulations. In addition, 2 online courses on preventing insider trading were held to share major event cases that may be considered insider trading.	

## CLIMATE-RELATED INFORMATION OF TWSE/ TPEX LISTED COMPANY

Risks and Opportunities Posed by Climate Change to the Company and Relevant Countermeasures taken by the Company

	ltems	Chapter or Implementation
1	Describe the Board of Directors' and management's oversight and governance of climate-related risks and opportunities.	Chapter 5 > Responses to Climate Change > The Four Pillars of the TCFD Framework
2	Describe how the identified climate risks and opportunities affect the business, strategy, and finances of the business (short, medium, and long term).	Chapter 5 > Responses to Climate Change > Climate-related Risks, Opportunities, and Financial Impacts
3	Describe the financial impact of extreme weather events and transformative actions.	Chapter 5 > Responses to Climate Change > Climate-related Risks, Opportunities, and Financial Impacts
4	Describe how climate risk identification, assessment, and management processes are integrated into the overall risk management system.	Chapter 4 > Risk management > Identification and Management of Significant Risks Chapter 5 > Responses to Climate Change > The Four Pillars of the TCFD Framework
5	If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be described.	Chapter 5 > Responses to Climate Change > Climate Scenario Analysis
6	If there is a transition plan for managing climate-related risks, describe the content of the plan, and the metric and target used to identify and manage physical risks and transformation risks.	Chapter 5 > Responses to Climate Change > The Four Pillars of the TCFD Framework
7	If internal carbon pricing is used as a planning tool, the basis for setting the price should be stated.	Internal carbon pricing is not currently used in planning.
8	If climate-related targets have been set, the activities covered, the scope of greenhouse gas emissions, the planning schedule, and the progress achieved each year should be specified. If carbon credits or renewable energy certificates (RECs) are used to achieve relevant targets, the source and quantity of carbon credits or RECs to be offset should be specified.	Chapter 5 > Responses to Climate Change > The Four Pillars of the TCFD Framework Chapter 5 Energy management There is currently no use of carbon credits or renewable energy certificates (RECs) to achieve relevant goals.
9	Greenhouse gas inventory and assurance status.	The scope of greenhouse gas inventory includes the first and second categories of greenhouse gases in the Lioudu and Chungli factories. The inventory situation for this year is detailed in Chapter 5 Energy Management > GHG Emission Statistics. The greenhouse gas inventory reports and verification certificates for the 2 factories were obtained in May 2024.











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