

2023

SOUTHERN TAIWAN SCIENCE PARK ANNUAL REPORT



South wind
blows slowly and endlessly

2023



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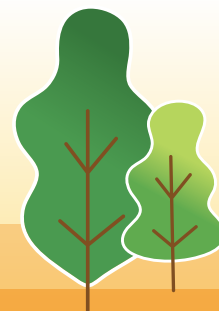
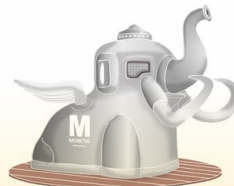


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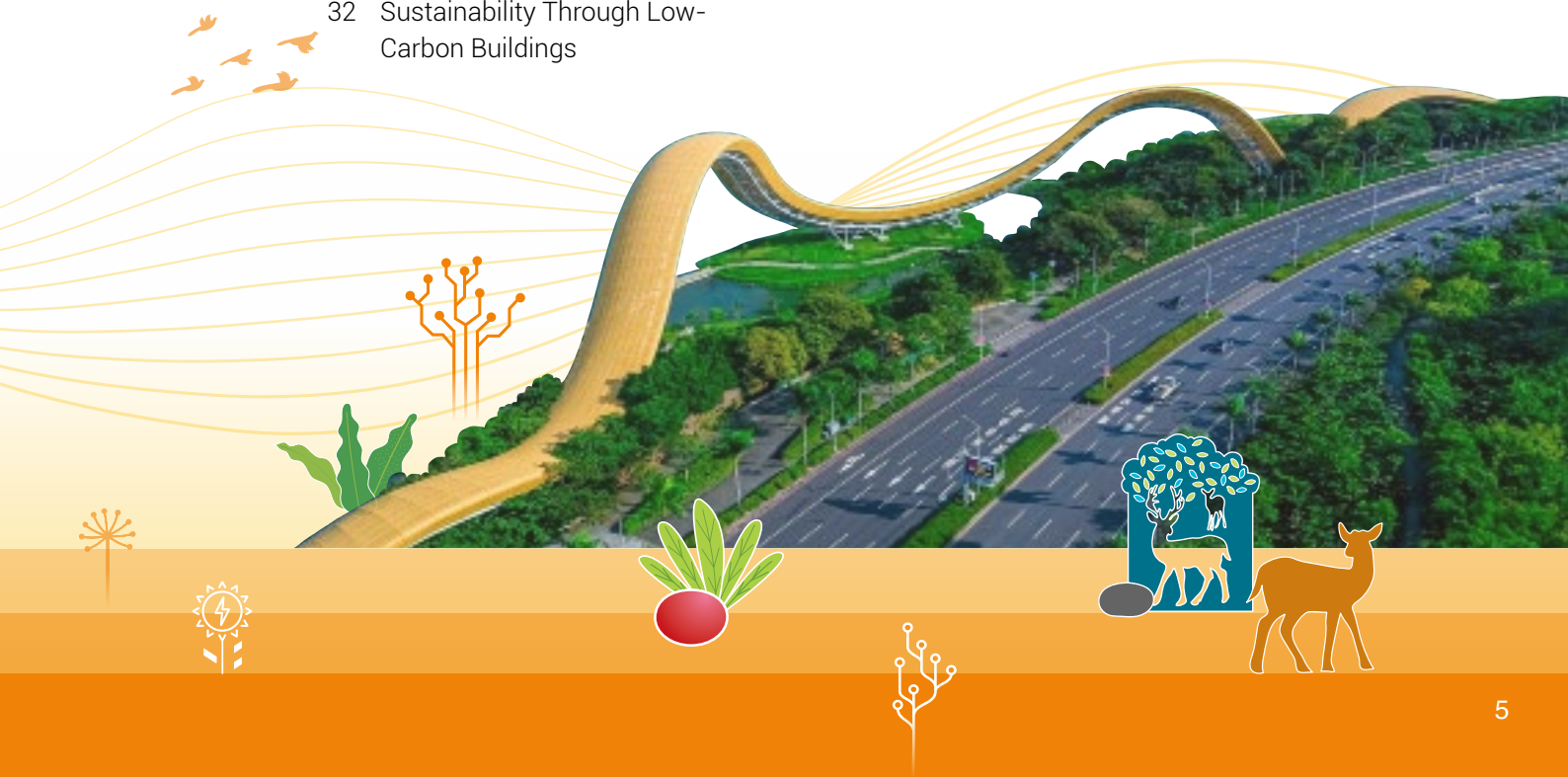
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Director-General's Foreword

STSP Thriving in the Year of the Dragon

Facing challenges such as global inflation, rising interest rates, undigested inventories, and the impact of geopolitics in 2023, STSP has shown a growth momentum that is not afraid of headwinds. Compared with the previous year, its overall turnover grew by more than NT\$100 billion and surpassed NT\$1 trillion for three consecutive years. In addition, there have been many highlights in industry investments. In 2023, 20 new tenant companies invested NT\$30.169 billion, and high-tech companies continue to invest resources to implement the park investment plans and enhance the competitiveness of the industrial cluster.

The turnover has continued to rise, business recruitment has achieved remarkable results, and the construction of various parks is in full swing, with five developments: Expansion of Phase III of the Tainan Science Park and Ciaotou Science Park are according to schedule. Chiayi and Pingtung Science Parks have started groundbreaking and business recruitment procedures. The preparation of Nanzih Science Park has been approved. Existing parks have continued to optimize software and hardware facilities and move towards the 2035 vision of “forward-looking innovation, democratic inclusiveness, resilient sustainable” technology.

In addition, the STSP has continued to actively promote sustainable resources, and the total supply of reclaimed water in Yongkang and Anping Science Parks has increased to 58,000 tons/



day, accounting for 20% of the water used in Tainan Science Park, and stabilizing the regional water supply. The park's sustainability measures were recognized with the 2023 Taiwan Corporate Sustainability Awards (TCSA), and won the highest honor for corporate sustainability reports - "Government Agency Sustainable Development Voluntary Department Review (VDR) Platinum Award" and the "Sustainability Individual Performance Award - Workplace Welfare Leadership Award." The Resource Recycling Center has actively improved the energy efficiency of facilities and implements various energy-saving measures. It also won the Silver Award in the 2023 Energy Saving Benchmark Award of the Ministry of Economic Affairs.

STSP has endured great hardship along the way and accumulated production value until it has exceeded NT\$1 trillion every year. Combined with the new construction and expansion of Tainan Phase III, Ciatou, Chiayi, Pingtung, and Nanzih Science Parks, STSP has developed five new streams of revenue and provided abundant momentum for industrial development. In the future, the STSP will continue to promote innovation and transformation of science parks, and assist companies and local residents to mutually prosper. We look forward to working with all sectors in developing the Southern Taiwan technology corridor, and creating sustainable, livable, and happy science parks.

Director-General **Chen-Kang Su**

2024.03



Chapter 1

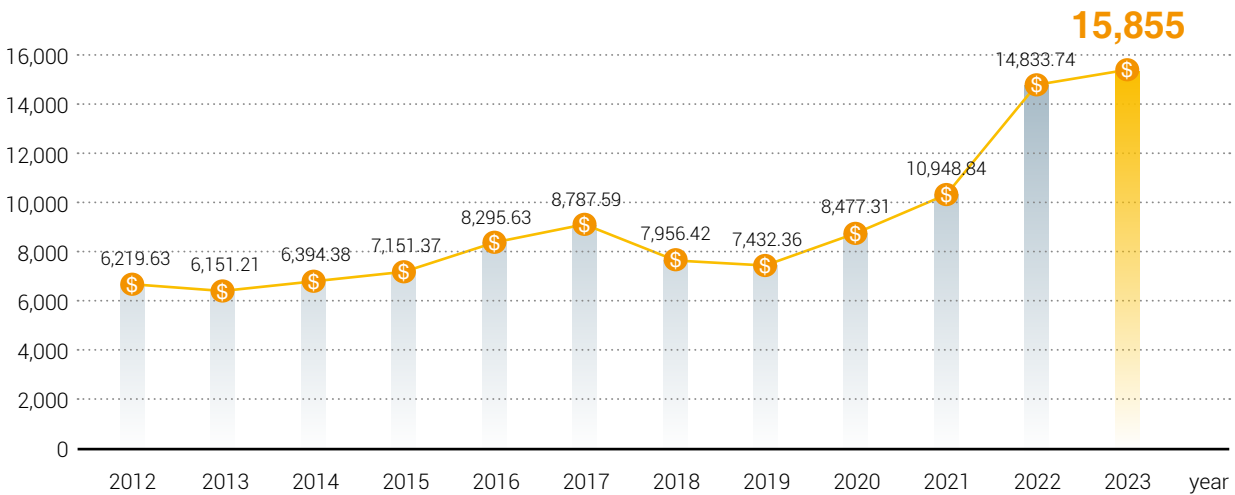
South Wind Rises to Welcome the New Year

Steady Growth to Over NT\$1 Trillion for the Third Time

The Southern Taiwan Science Park (STSP) continued its excellent performance in 2022. Benefiting from the solid support of mass production using 3nm process in the IC industry, turnover reached NT\$1,585.5 billion in 2023, an increase of 6.88% compared with 2022. This is the third consecutive year that revenue surpassed NT\$1 trillion since 2021. In addition, attracted by the industrial clusters, among the 273 tenant companies effectively approved in 2023, 22 are in the newly established Ciaotou Science Park, Chiayi Science Park, and Pingtung Science Park. The total number of employees in the parks has steadily grown to 92,000, reaching a record high.

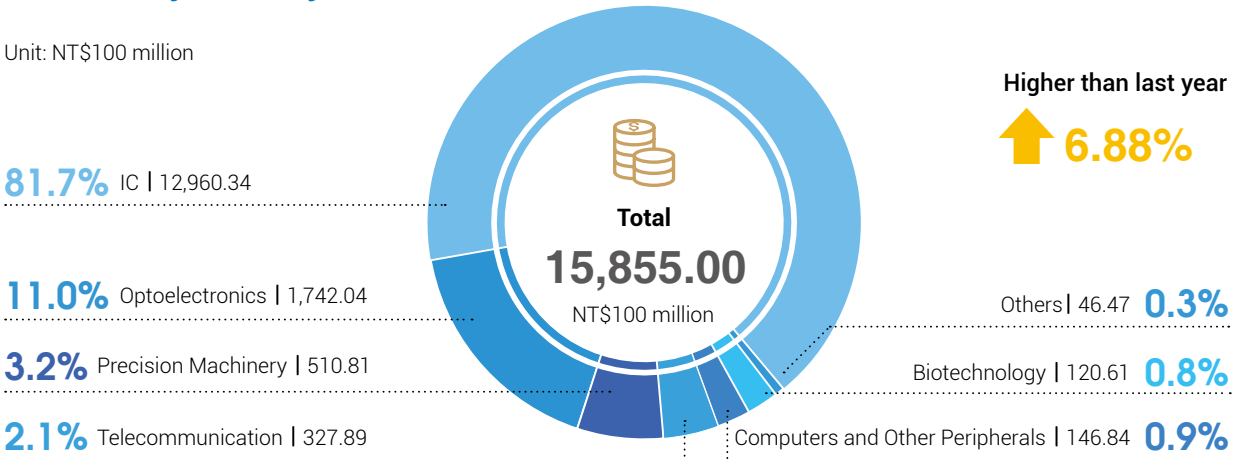
Annual Turnover

Unit: NT\$100 million



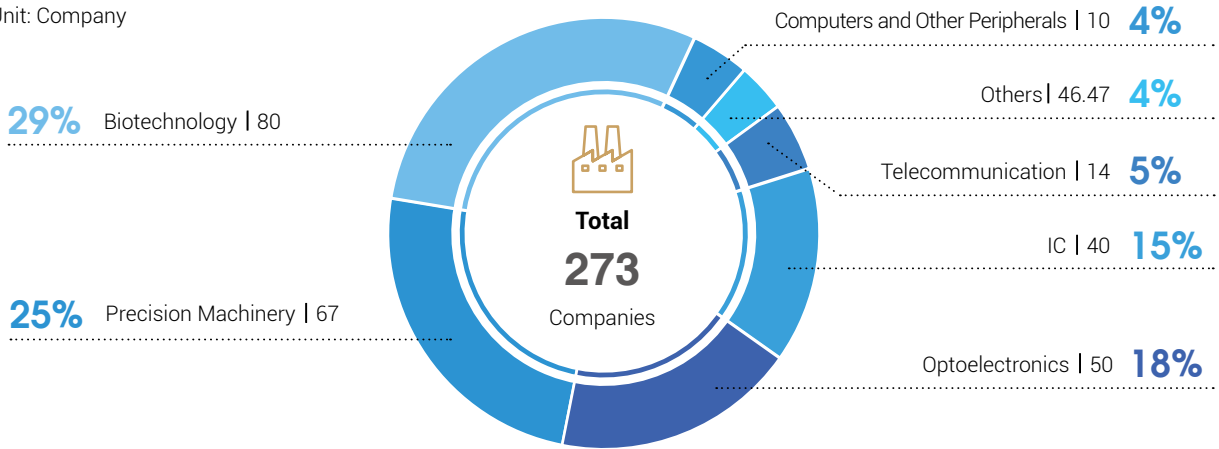
Turnover by Industry

Unit: NT\$100 million



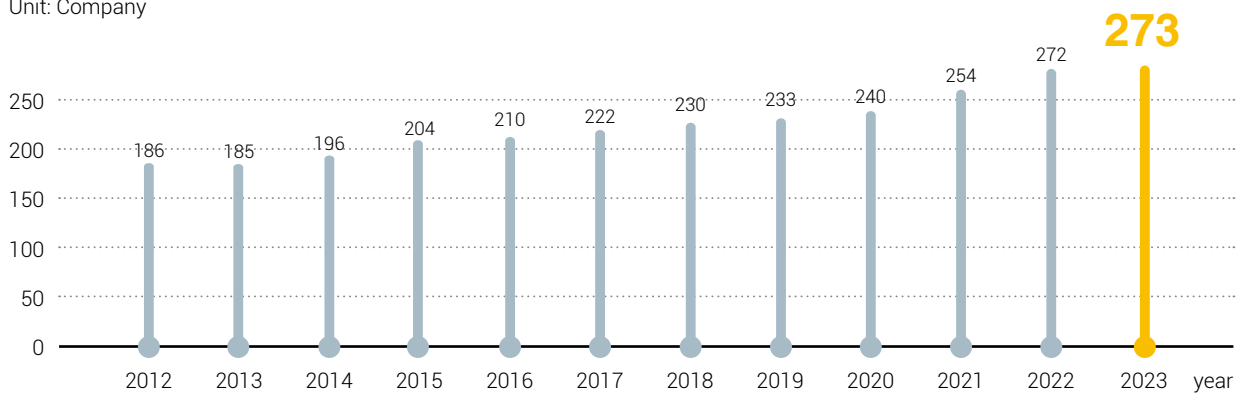
Approved Tenant Companies by Industry

Unit: Company



Accumulated Number of Approved Park Enterprises Over the Years

Unit: Company

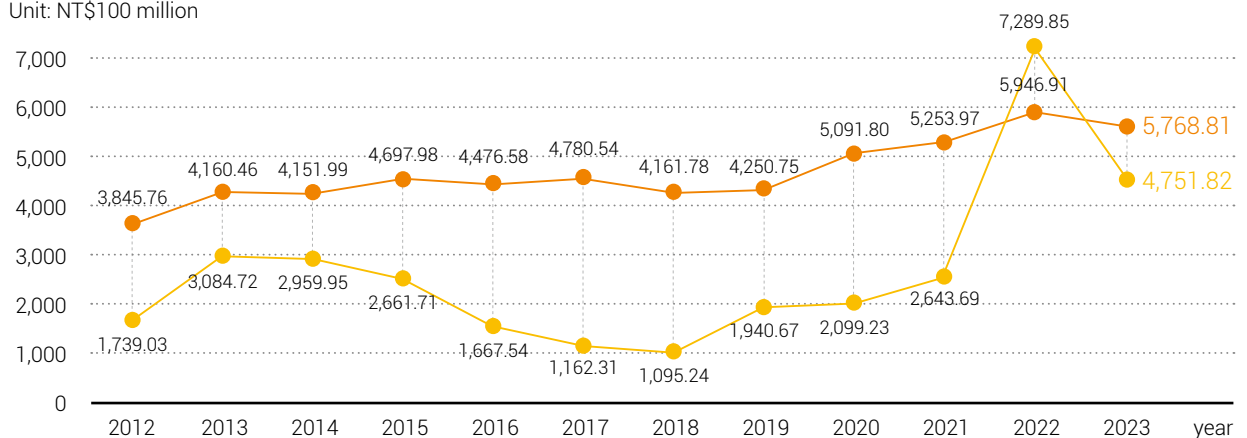


Import and Export Value Over the Years

The total trade volume in 2023 was NT\$10,520.63 billion.

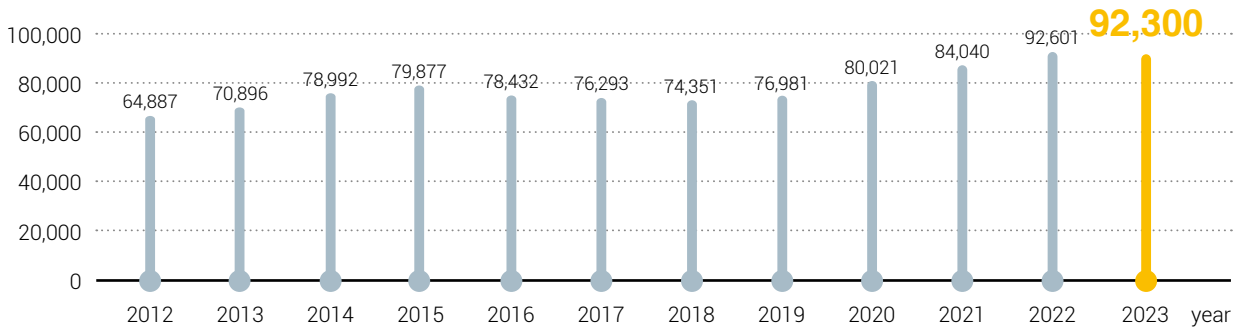
Import Value NT\$ 4,751.82 billion Export Value NT\$ 5,768.81 billion

Unit: NT\$100 million



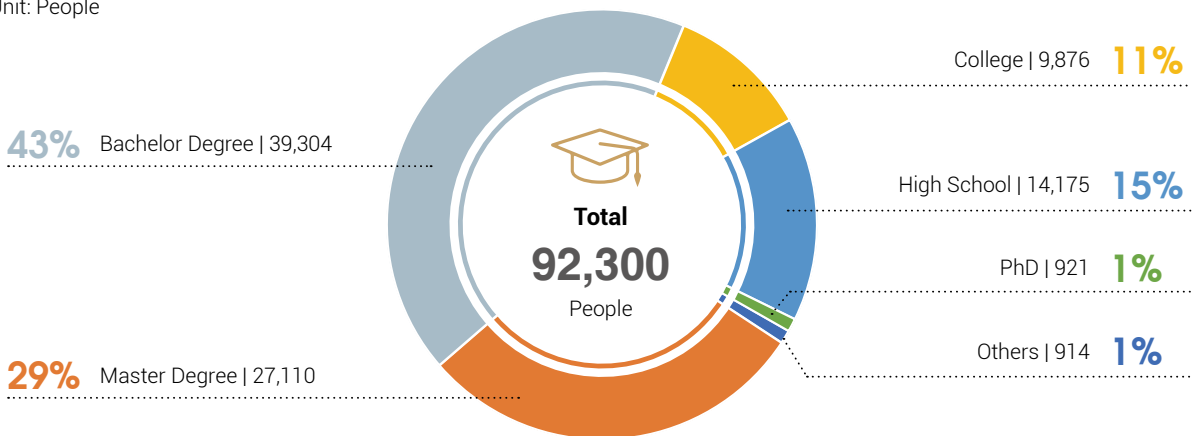
Workers Employed by STSP Tenant Companies by Year

Unit: People



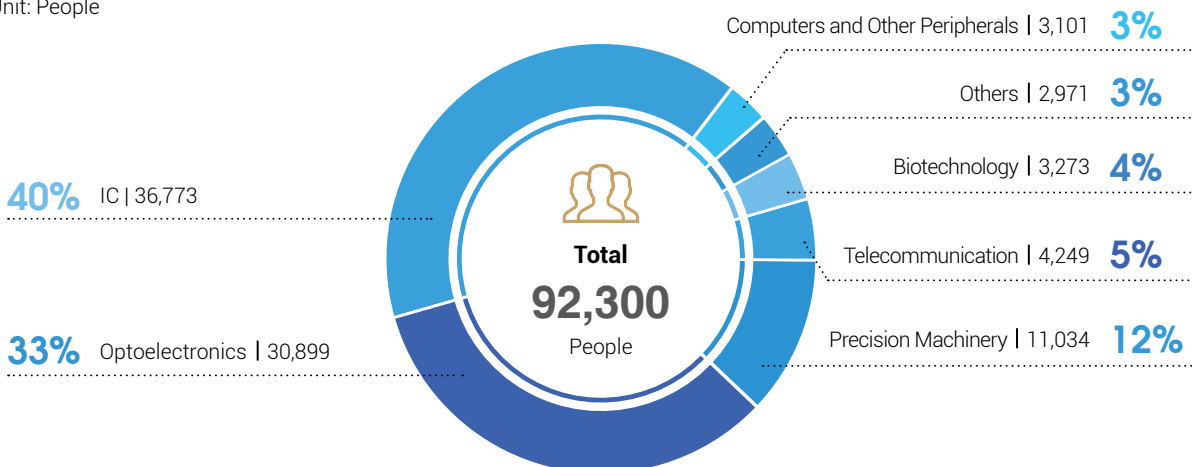
STSP Workers' Educational Backgrounds

Unit: People



Workers Employed by the STSP Park Enterprises by Industry

Unit: People



Status of Science Parks in Southern Taiwan

Tainan Science Park

Total area

1,127.66 hectares



Turnover

NT\$ **1,524.688** billion



Number of employees

80,860 people



Number of Tenant Companies Approved

148 companies



Space for lease

531.15 hectares



Space leased

529.17 hectares



Land lease rate

99.63%

Progress of the Expansion of Phase III of Tainan Science Park:

2023.6.14 Announcement and implementation of changes to urban planning.

2023.6.29 Groundbreaking, blessing, and business recruitment activities, broke ground for public construction of the park and allowed enterprises with simultaneously construct their plants.

Kaohsiung Science Park

Total area

566.98 hectares



Turnover

NT\$ **608.12** billion



Number of employees

11,440 people



Number of Tenant Companies Approved

103 companies



Space for lease

236.90 hectares



Space leased

234.46 hectares



Land lease rate

98.97%

Ciaotou Science Park (under construction)

Total area

262.39 hectares



Number of Tenant Companies Approved

18 companies

Implementation progress

- 2023.6.10 ATP Electronics broke ground and became the first park enterprise to break ground in Ciaotou Science Park.
- 2023.8.1 The Preparatory Office for the National Experimental High School at Kaohsiung Science Park was established.
- 2023.11.3 Ground-breaking ceremony for the Digital Innovation Complex Building Group in Ciaotou Science Park.

Chiayi Science Park (under construction)

Total area

88 hectares



Number of Tenant Companies Approved

2 companies

Implementation progress

- 2023.2.22 Environmental impact assessment passed the review.
- 2023.5.19 Development plan and detailed plan approved by the Ministry of the Interior.
- 2023.5.22 Groundbreaking, blessing, and business recruitment activities, broke ground for public construction of the park and allowed enterprises with simultaneously construct their plants.

Pingtung Science Park (under construction)

Total area

73.83 hectares



Number of Tenant Companies Approved

2 companies

Implementation progress

- 2023.2.22 Environmental impact assessment passed the review.
- 2023.5.19 Development plan and detailed plan approved by the Ministry of the Interior.
- 2023.5.19 Groundbreaking, blessing, and business recruitment activities, broke ground for public construction of the park and allowed enterprises with simultaneously construct their plants.

Nanzih Science Park (under preparation)

Total area

175.30 hectares

Implementation progress

2023.7.14 The Executive Yuan approved the preparation project.

Business Recruitment and Investment to Complete Industrial Clusters

Improved Investment & Boosted Industrial Upgrading

In 2023, the presence of 20 new park enterprises was approved with an accumulated investment amount of NT\$30.169 billion. Among them, 3 were in the IC industry with an investment amount of NT\$18.056 billion, and one was in biotechnology with an eye-catching investment amount of NT\$4.328 billion. Furthermore, among the 11 park enterprises that expanded their investment in the STSP, two were in the IC industry with an expanded investment amount of NT\$3.712 billion, indicating that the STSP is an important site for advanced IC manufacturing processes.

Development of Industrial Clusters and New Park Enterprises



IC Industrial Cluster

The STSP's IC industry cluster is quite complete. Major manufacturers such as TSMC and UMC continue to invest in advanced processes, which has led to upstream IC design, materials, equipment and components, as well as downstream packaging and testing supply chains to become park enterprises. Driven by demand from the AI, high-performance computing, and automotive electronics industries, foreign companies such as German company Merck, American company Lam Research, and Japanese companies Tokyo Electron Limited and Tohcello have all increased their investment in the STSP. In 2023, Novatek, Dutch company Entegris, and Taisic Materials invested NT\$18.056 billion to become park enterprises.



Japanese company Tohcello's new Kaohsiung plant significantly increased production capacity of tape for semiconductor processes.

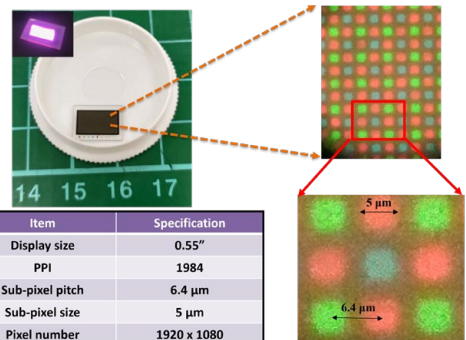


Optoelectronic Industrial Cluster

The STSP is the most complete vertically integrated cluster of the domestic panel industry, covering upstream key components, such as: glass substrates, liquid crystal materials, touch panel LCDs, brightness enhancement films and prism sheets, polarizers, photomasks, backlight modules, midstream panels and downstream LCD TVs. The cluster is actively transitioning to high-end IT, industrial control, automotive, and healthcare niche products. In addition, in response to climate change and the trend of net-zero emissions, the STSP is also an important field for promoting the green energy technology industry, attracting clean energy supply, smart energy-saving systems, and energy storage applications companies to become park enterprises. In 2023, Daxin Materials, Cheng Mei Materials, Taiwan Nanocrystals, Taiwan Truewin Battery, and Blade Hydrogen Green invested NT\$1.92 billion to become park enterprises.



Taiwan Truewin Technology invested NT\$700 million to establish a branch in Ciaotou Science Park.



The quantum dot color filter product developed by Taiwan Nanocrystals has a pixel size of only 5μm.

Precision Machinery Industrial Cluster

The precision machinery industry in the STSP mainly produces automation or testing equipment, which supports IC and optoelectronics companies inside and outside the park to increase production capacity, attracting domestic and foreign equipment manufacturers to become park enterprises and form a unique industrial chain. In 2023, Kaori, Syntec, Gudeng Equipment, Carbon-Based Technology, TSGC, Hsuan Yuan Technology, and Cinda Precision invested NT\$3.43 billion to become park enterprises.



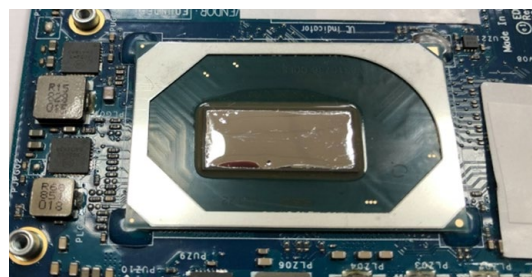
TSGC won the Future Technology Award at the 2023 Taiwan Innotech Expo.

Biotechnology Industrial Cluster

The STSP biotechnology sector combines the advantages of the ICT and biomedicine industries based on the foundation of vaccines, pharmaceuticals, detection reagents, dental products, orthopedics, and aesthetic medicine, developing a precision health industry chain that crosses over healthcare, ICT, technology, biopharmaceuticals, and medical device industries. In 2023, HOPAX became a park enterprise and invested NT\$4.328 billion in the STSP.

Computer & Peripherals Industrial Cluster

The STSP is home to park enterprises such as Wiwynn, GARUDA, APAQ, ADAT, and Brogent Technologies. With the development of the metaverse, cyber-physical integration applications, and cloud computing, software/hardware and integration enterprises in the computer and peripherals industry have shown interest in investing in the STSP. In 2023, APAQ, Kuang Ho, and i-Family invested NT\$2.4 billion to become park enterprises.



i-Family's "ultra-high performance liquid metal" has extremely high thermal conductivity and stability.

ICT Industrial Cluster

Park enterprises of the STSP that are in the telecommunications industry include Accton, Walsin, Landmark Optoelectronics, Transcom, WNC, AWSC, APOGEE, and DYNALZ. With the development of emerging technologies such as AI, 5G, Internet of Things, and edge computing, and the upgrade of network bandwidth driven by related infrastructure, the market demand for telecommunications services and data centers will drive related manufacturers to become park enterprises. In 2023, Edgecore Networks became a park enterprise and invested NT\$35 million in the STSP.

Attracting International Investments to Further Upgrade the Semiconductor Industry

Merck Invests Semiconductor Resources to Develop Cutting-Edge Materials

"Merck Semiconductor Solutions Mega Site" is Merck's first large-scale semiconductor materials technology park in the world, covering an area of about 15 hectares. The company plans to introduce product lines such as thin films, patterning, and special gases in advanced processes. The new site and production lines are expected to be completed in 2025, and will create over 400 jobs in Kaohsiung Science Park, providing even more development opportunities to the semiconductor industry in the STSP.



2023.2.8 Distinguished guests attended the groundbreaking ceremony of Merck Semiconductor Solutions Mega Site.

Entegris Leads the World as a Sustainable Advanced Manufacturing Plant

Entegris held the inauguration ceremony of its Kaohsiung Plant in the STSP on May 10, 2023. The plant provides materials required for advanced semiconductor processes and covers an area of approximately 54,000 square meters. It is expected to create approximately 580 job opportunities and will improve supply performance in Asia. Furthermore, operations of the new plant are designed to meet corporate social responsibility and sustainability goals for 2030, in order to implement environmental sustainability. The plant is expected to achieve 100% renewable energy use in 2030, and contribute to a zero-carbon, green, and sustainable future.



2023.5.10 Distinguished guests celebrated the opening of Entegris' advanced manufacturing plant in Kaohsiung.

Advanced Echem Materials Kaohsiung Phase II Breaks Ground to Complete the Semiconductor Ecosystem

In order to expand production capacity, Advanced Echem Materials invested NT\$2 billion to build the Phase II plant, and held a groundbreaking ceremony for Phase II of the Kaohsiung Plant in the STSP on July 10, 2023. It will combine innovative technologies with local R&D and manufacturing advantages. The company is committed to the independent development of semiconductor lithography materials, and develops prospective innovative materials tailored for customers. It is expected to create an annual production value of NT\$6 billion to strengthen industry resilience, drive the development of industrial clusters, and make the high-tech industry chain in Southern Taiwan more complete.



2023.7.10 Distinguished guests attended the groundbreaking ceremony for Phase II of the Kaohsiung Plant in the STSP.



2023.7.26 Distinguished guests attended the ribbon-cutting ceremony for the opening of Green Filtec's STSP Plant.

Good Green Energy Partner of Semiconductors, Green Filtec Completes STSP Plant

Green Filtec is the 18th diamond-level green building in the STSP. It continues to innovate to promote eco-friendly and energy-saving technologies, and contributes to the global green transition. The semiconductor-grade chemical filters and mobile micro-pollutant filtration equipment developed and produced by the company can help the process environment of semiconductor manufacturers meet high cleanliness requirements, thereby improving the yield of advanced semiconductor processes, effectively attracting international semiconductor supply chain manufacturers, and creating the world's largest semiconductor industry cluster.



2023.10.6 The completion ceremony of Taiwan Valqua Engineering International, Ltd. used a wooden hammer to knock open wine barrels and pray for blessings.

Semiconductor Industry Pioneer Team Taiwan Valqua Completion

Taiwan Valqua Engineering International, Ltd. established its STSP Branch in Kaohsiung Science Park in 2020 in response to its business expansion in Taiwan and overseas. The branch was completed in October 2021, and its second anniversary ceremony was postponed to 2023 due to the pandemic. The company produces chemical storage tanks, which are required for advanced semiconductor processes. It is a pioneer in the semiconductor industry and will continue to promote green technology and contribute to the high-quality development of the semiconductor industry.

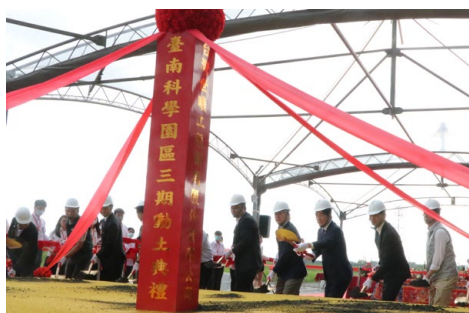
Chapter 2

Create New Opportunities to Inject Living Water

Establish a Multi-Faceted Park in the Technology Corridor

South Wind Gains Momentum and Creates a New Situation in Phase III

The National Science and Technology Council (NSTC) and Tainan City Government held the “Tainan Science Park Phase III Groundbreaking, Blessing, and Business Recruitment Event” on June 29, 2023. The event invited Vice President Lai Ching-De and other representatives of industry, government, academia and research institutes, as well as 8 companies with the intention to invest in building plants, jointly witnessing the official commencement of construction of Tainan Science Park Phase III. Vice President Lai Ching-De affirmed the STSP’s contribution to the development of domestic high-tech industries, and said that he will continue to improve Taiwan’s investment environment. In the future, Tainan Science Park Phase III will use the semiconductor industry as its core foundation and promote the smart machinery and precision health industries. It is expected to provide 4,900 job opportunities and create an annual production value of NT\$39.2 billion.



(Left) 2023.6.29 Tainan Science Park Phase III Groundbreaking Ceremony, guests held golden pickaxes and prayed for blessings.

(Right) 2023.6.29 Distinguished guests attended the Tainan Science Park Phase III Groundbreaking, Blessing, and Business Recruitment Event.

Ciaotou Science Park Provides Diverse Services and Breaks Ground for the Digital Innovation Complex Building Group

In order to meet the needs of tenant companies for administrative services and commercial services, the construction of a digital innovation complex building group was planned in Ciaotou Science Park. Various development projects have been launched one after another, and a groundbreaking ceremony was held on November 3, 2023. The building group is planned as hybrid space, including commercial space, standard factory offices, innovation and incubation offices, digital innovation spaces, banks and child care centers. In the future, they can provide startups with the opportunity to develop digital technology, support the country’s soft power, and consider the work and life needs of tenant companies.



(Left) Simulation diagram of the innovation complex building group in Ciaotou Science Park.

(Right) 2023.11.3 Prayer for blessing ceremony for the Innovation Complex Building Group Project of Ciaotou Science Park.

Chiayi Science Park Broke Ground to Attract Investments and Further Extend the Technology Corridor

The NSTC and Chiayi County Government co-organized the “Chiayi Science Park Groundbreaking, Blessing, and Business Recruitment Event” on May 22, 2023. Chiayi Science Park will connect the existing Chiayi County Government District, THSR Chiayi Station, and the Southern Branch of the National Palace Museum to improve life functions, attract more outstanding talents to settle down, and develop in Chiayi. This is expected to create an annual production value of NT\$38 billion and 5,700 job opportunities.



2023.5.22 Premier Chen Chien-Jen took a group photo with distinguished guests attending the groundbreaking ceremony of Chiayi Science Park.



2023.5.22 All guests prayed for blessings at Chiayi Science Park's groundbreaking ceremony.

Industries in Pingtung Science Park Revamped, Creating a New Situation in Southern Taiwan

On May 19, 2023, the NSTC and Pingtung County Government co-organized the “Pingtung Science Park Groundbreaking, Blessing, and Business Recruitment Event,” and joined hands with 4 companies in the blessing and groundbreaking ceremony. In the future, it will be connected with major construction projects, such as the Technology Industrial Park of the Ministry of Economic Affairs, HSR Pingtung Station, National Experimental High School at Pingtung Science Park, and Sports and Leisure Park to improve the science park's living functions, attract manufacturers and talents to become tenants, and lead the transformation and upgrading of Pingtung's local industries. It is expected to create an annual production value of NT\$36 billion and provide 5,400 job opportunities.



2023.5.19 Distinguished guests attended Pingtung Science Park's Groundbreaking, Blessing, and Business Recruitment Event.

Semiconductor Supply Chain Leads Nanzih Science Park to Create New Opportunities

To proactively plan for semiconductor development needs and consolidate the competitive advantages of Taiwan's semiconductor industry, the Executive Yuan approved the Nanzih Science Park Preparation Plan in July 2023. In the future, the semiconductor supply chain and other emerging technology industries based on the park's six major industries will be introduced, and is expected to create an annual production value of approximately NT\$450 billion and 4,500 jobs.

Newly Established Experimental High School

National Experimental High School at Chiayi Science Park

National Experimental High School at Chiayi Science Park has been established in coordination with the development and business recruitment efforts of Chiayi Science Park. The school is committed to the pursuit of scientific truth, community service, cultural enrichment, and the promotion of educational excellence. Our faculty is actively encouraged to participate in the New Pedagogies for Deep Learning (NPDL) initiative, focusing on the design of innovative international courses.

Recruitment for students will commence in 2024, welcoming senior high school, junior high school, and elementary school students. Concurrently, a bilingual department will be inaugurated, staffed with qualified foreign educators. The first and second phases of school construction are scheduled for completion in 2026 and 2027, respectively. This development aims to invigorate Chiayi's international educational landscape, establishing a premier institution dedicated to nurturing global leadership talent.



Simulation diagram of National Experimental High School at Chiayi Science Park

National Experimental High School Opened at Pingtung Science Park

In order to attract investments for Pingtung Science Park, National Experimental High School at Pingtung Science Park comprehensively cultivates talents for the new era through science and technology, internationalization and humanities, supplemented by the cultivation of inquiry skills, bringing a new curriculum to Pingtung. The school offers a variety of courses that are in line with international standards, and the teachers and courses are also integrated with each other. In 2024, the school will recruit senior high school, junior high school, and elementary school students. A bilingual department will also be established simultaneously to enrich Pingtung's international course resources. The first and second phases of the school buildings are expected to be completed in 2026 and 2027, respectively, creating a sustainable education base that will weave dreams for Pingtung.



Simulation diagram of National Experimental High School at Pingtung Science Park

The Preparatory Office for the National Experimental High School at Kaohsiung Science Park Was Established

The National Experimental High School at Kaohsiung Science Park establishment project was approved by the Ministry of Education in May 2023. The preparatory office was established on August 1 of the same year, and the unveiling ceremony was held on the 2nd. Deputy Minister Chen Tzong-Chyuan of the NSTC, Kaohsiung City Mayor Chen Chi-Mai, Deputy Director-General Tai Shu-Fen of the K-12 Education Administration of the Ministry of Education, Director-general Su Chen-Kang of the STSPB, Director Yang Ya-Fei of the Preparatory Office, Director Kuo Chun-Hui of the Allied Association for Science Park Industries Southern Taiwan Office, and Legislator Chiu Chih-Wei attended the event. Student recruitment will start with junior high schools and elementary schools in 2025.



2023.8.2 Group photo at the unveiling ceremony of the National Experimental High School at Kaohsiung Science Park

Emerging Technologies Accumulate Industrial Capabilities

Scientific Research x Biomedical Cross-Domain Technical Cooperation

To encourage cross-domain technical cooperation between tenant companies, link the R&D capabilities of academia, and jointly invest in the R&D of emerging technologies. The 2023 “Science Park Emerging Technology Application Program” subsidized a total of 7 projects with a subsidy amount of NT\$34.85 million, and encouraged tenant companies to invest NT\$52.95 million in R&D expenses. The program is expected to generate approximately NT\$550 million in turnover in the three years after it is concluded.

In “Healthcare+ Expo Taiwan 2023,” the NSTC’s Hsinchu, Central and Southern Taiwan Science Park Administrations jointly established the “Science Park Pavilion” in the Nangang Exhibition Center. The exhibition period was from November 30 to December 3, 2023. A total of 18 biomedical companies from the STSP participated in this exhibition, echoing the theme of “precision medicine” and displaying products such as precision testing, smart healthcare, regenerative medicine, and biopharmaceuticals, fully demonstrating the STSP’s fruitful results in precision diagnosis, treatment, care and prevention.



2023.11.30 Opening ceremony of the “Science Park Pavilion” of Healthcare+ Expo Taiwan



2023.11.30 Tenant companies of the STSP shared their results.

Training x Cultivation to Improve Employee Competencies

In the 2022 academic year, the “Science Park Talent Cultivation Subsidy Project” cultivated future talents for the high-tech industry. A total of 81 students became interns at 26 tenant companies. This project helped students obtain 199 certificates and facilitated 16 industry-academia cooperation projects. The program has trained 925 students, in which 23 successfully transitioned into employment. In terms of competency training, the project assisted 88 tenant companies in improving the professional skills of their employees. A total of 49 professional talent training courses and 8 automation guidance sessions were offered with a total of 1,969 employees trained.

In order to reserve professionals for the newly established parks, 8 talent reserve training courses, including space technology and green materials, were offered in colleges in Southern Taiwan for the newly established parks in 2023, with 480 students participating. This allowed students to understand industry trends in advance and prepare future talent for industries.



2023.6.5 Students visited the STSP Plant of Innolux Corporation.



(Left) 2023.11.11 Graduation Ceremony for the Space Technology Industry Course.



(Right) 2023.11.11 The course invited “Rocket Uncle” Director Wu Tsung-Hsin to introduce the development vision of the space industry.

Skills Honed in the Start-Up Workshop Produce Brilliant Results in the FITI program

In 2023, the team of “National Cheng Kung University Center for Genomic Medicine” developed the icONE intelligent high-quality embryo prediction system, which is equipped with unique biological information analysis and AI technology, with a prediction accuracy reaching 92%, winning the Excellent Award. The “Natural Plant Product Development Team,” “Oxygen Squared,” “Carbon Sink Kitchen,” “Tricuss,” and “Vasscan” all won the Potential Award, showing the brilliant achievements of the Start-up Workshop over the past decade.



(Left) 2023.6.30, (Right) 2023.12.1 Start-ups guided by the STSP received major award at the FITI Program Award Ceremony of the NSTC.

STSP AI_ROBOT Manufacturing Base Establishes Low-Carbon and Smart Solutions

STSP AI_ROBOT manufacturing base independently developed the SMB smart monitoring system, combined with newly developed automatic control modules. It uses 5G technology and encryption technology to ensure information security for industries, reduce machine failure rates, and resolve manpower shortage issues. It works with large manufacturers outside the region, and uses the model of large enterprises leading small enterprises to apply common technologies in the fastener industry, build confidence of domestic and foreign customers in low-carbon products.

Participate in Exhibitions and Exchanges to Find International Allies

2023 SEMICON Taiwan

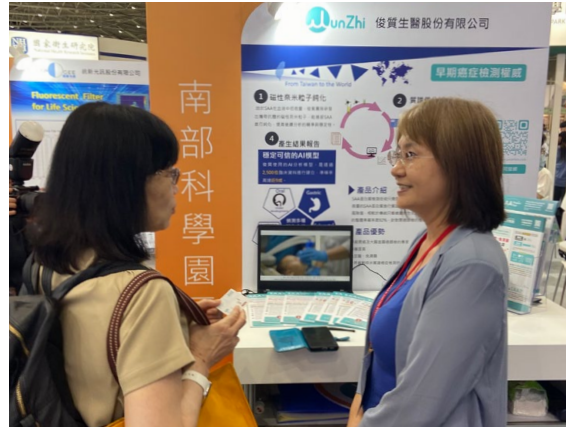
To continue expanding the Southern Taiwan technology corridor, the STSP led Chung Yo, LiveStrong Optoelectronics, PentaPro Materials, AMETEK Taiwan, Huang Liang Biomedical Technology, APOGEE, CTC, TTMC, Jumbo Laser Plasma, Green Power Engineering Corporation, Streber-Tech, Microcosm, and Taiwan-ATM to the 2023 SEMICON Taiwan, demonstrating the STSP’s strong capabilities in manufacturing and equipment components.



(Left) 2023.9.6 Photo of STSPB Director-General Su Chen-Kang with exhibitors.
(Right) 2023.9.6 The German Trade Office Taipei visited pavilion of the STSP.

2023 Bio Asia-Taiwan

To connect the development of Taiwan’s biomedical industry corridor, the STSP called on tenant companies FINEX Co., Ltd., LiveStrong Optoelectronics, Jun Zhi Biomedical, APOGEE, Ducolege, Charsire, T-ACE Medical, G&E Corporation, Huang Liang Technologies, Diamond Digital, Green Power Engineering Corporation, and Bionet to participate in the “2023 BIO Asia-Taiwan” and jointly built the Science Park Pavilion with Hsinchu Science Park, Central Taiwan Science Park, and Taiwan Instrument Research Institute. The STSP integrated local industry, academia, research, and medicine R&D capabilities in Chiayi, Tainan, Kaohsiung, and Pingtung to continue to focus on the precision health industry.



2023.7.27 Exhibitor Jun Zhi Biomedical introduced its proprietary SAA protein testing technology to Deputy Minister Chen I-Chuang of the NSTC.



2023.7.27 Deputy Minister Chen I-Chuang of the NSTC visited the Science Park Pavilion to applaud all exhibitors.

Scientific Research Exchanges for International Goodwill

In 2023, the STSP received 74 domestic and foreign visiting groups with a total of 1,319 participants, including representatives from Lithuania, Canada, CTBC Bank, Merck, the Australian Office Taipei, the National Association of Government Labor Officials, the Ministry of Foreign Affairs, and AIT, as well as important delegations including Republic of Paraguay Chamber of Deputies, Japan’s City of Kitakyushu Industry and Economics Bureau, Mexican Secretariat of Economy, and Tainan New Generation.



(Left) 2023.2.7 The Deputy Minister of Education, Science and Sports of the Republic of Lithuania and his delegation visited the STSP. (Right) 2023.11.1 The delegation of U.S. government labor officials visited the STSP.

Annual Conference of the International Association of Science Parks in Luxembourg

Director-general Su Chen-Kang led a delegation to Europe to participate in the Annual Conference of the International Association of Science Parks in Luxembourg from September 9 to 17, 2023. Participants from 55 countries discussed challenges that science parks might face in the future based on the theme: "Megatrends in Innovation Ecosystem: What are the impacts for STPs & AOIs?" and referenced it for policies. The delegation also visited the Tech Lane Ghent Science Park in Belgium, communicated with IDELUX, the economic development agency of Luxembourg, Belgium, and visited the self-driving vehicle parking lot of Stuttgart Airport in Germany. During the exchange process, the delegation learned about innovative measures in science parks overseas, the representative of the delegation also introduced that the STSP will develop the next generation of telecommunication technologies Beyond 5G and low-orbit satellites on the basis of the semiconductor industry.



2023.9.13 The three park administrations jointly attended the Annual Conference in Luxembourg.

Grasp the Global Pulse of Science and Technology, Business Recruitment and Marketing the STSP in the UK and France

Director-general Su Chen-Kang led a team to the UK and France for business recruitment, and not only visited British companies Oxford Instruments and IQE and French companies Schneider Electric, as well as the Paris-Saclay park administration, but also learned about global technology trends by participating in London Tech Week and Viva Technology, in order to drive industrial growth in the STSP.



(Left) 2023.6.12 Director-General Su Chen-Kang of the STSPB led a delegation to visit the British company IQE.
(Right) 2023.6.16 The delegation visited the TTA booth of Viva Technology from France.



Start-ups Learn from Israel, Scientific and Technological Exchanges without Borders

To understand the international start-up ecosystem, the administrations of the Hsinchu, Central, and Southern Taiwan Science Parks visited Israel from May 6 to 14, 2023. The delegation visited Israeli government agencies such as the Ministry of Science and Technology, Innovation Authority, and Ministry of Environmental Protection, as well as Ben-Gurion University technology transfer company, Mobileye, and Chain Reaction to learn about the mechanisms for promoting start-ups, and learn from their successful experience as the basis for industrial transformation and promoting R&D and innovation in science parks.



2023.5.8 Visited Mobileye

Chapter 3

Protect and Stabilize the Foundation

Prioritize Occupational Safety to Create a Friendly Workplace

New Extended Reality Technology Upgrades Occupational Safety Education

The STSP cooperated with the Occupational Safety and Health Administration of the Ministry of Labor, and used the assistance of advanced technologies such as VR, AR, MR, and AIoT to simulate roofs, construction scaffolds, aerial work vehicles, chemicals, forklifts, confined spaces, and cage hanging operations, allowing workers to receive interactive and immersive education and training in a safe environment. This improved their knowledge and skills for workplace hazard identification, and prevent occupational disasters from occurring. In 2023, a total of 132 training sessions were held, with a total of 3,460 participants. There were also 18 visits from schools and government agencies with a total of 437 participants.



(Left) 2023.6.28 Taipei City Labor Inspection Office visited XR field.



(Right) 2023.4.14 The Ministry of Labor and NSTC made a declaration on cooperation in the XR field.

Disaster Prevention and Relief System Regularly Patrols Science Parks

The STSP established a smart disaster prevention and relief system, integrated Geographic Information System (GIS) with buildings of tenant companies into a visual perspective, and then built a system with the locations and floors of all chemical storages, sharing it with local firefighting units and environmental protection units. Joint inspections and drills are periodically conducted with firefighting and environmental protection units, verifying information to ensure data accuracy and protect the safety of disaster relief personnel.

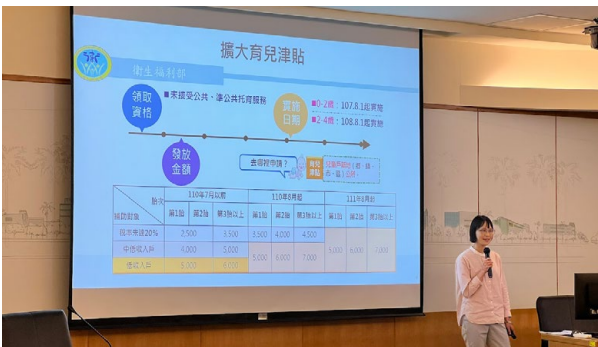


STSP earthquake early warning and smart disaster prevention and relief system integrates visualized disaster prevention system diagrams.

Creating a Friendly Workplace and Working Together to Honor STSP

A total of 4 seminars were held in 2023 to promote a friendly workplace. The event invited professionals to give lectures on the Act of Gender Equality in Employment and analyze sexual harassment cases in the workplace, in order to assist businesses with implementing workplace equality and promoting labor-management harmony. A total of 201 people participated in the event, including 80 mid-level and senior managers.

There were 61 recipients of the “Excellent Park Employee in 2023,” which was held on May 6, 2023. In addition, four tenant companies were recognized for excellence in “Promoting Gender Equality in the Workplace in 2022,” including WNC, Sumika Technology Co., Ltd., Hannstar, and Zacros Group. The event invited famous cellist Chang Cheng-Chieh to perform, touching STSP members in a unique with a musical feast, and building harmonious labor relations in the park.



(Left) 2023.5.23 Presentation on workplace child care services, (Right) 2023.5.6 The Excellent Park Employee commendation event invited cellist Chang Cheng-Chieh’s team to bring a musical feast.

Public-Private Partnerships to Care for Children Won the Child Care Excellence Award

The Lien Yuan STSP Employee Children’s Non-Profit Childcare Center participated in the “2023 Rating of Workplace Childcare Facilities Established by the Public Sector” of the Directorate-General of Personnel Administration, Executive Yuan, and won the High Distinction Award in the Kindergarten Group among 37 agencies (institutions). It is the first kindergarten in Taiwan to be jointly established by the public sector, a private company, and non-profit organizations. The venue is provided free of charge by the UMC, the STSPB commissioned Peng Wan-Ru Foundation to operate it, and the kindergarten began providing services on October 17, 2022. The kindergarten currently cares for 160 children with a satisfaction score of 4.8 points (out of 5 points). It provides high-quality childcare services to employees and has received unanimous praise.



(Left) Lien Yuan STSP Employee Children’s Non-Profit Childcare Center won the “High Distinction Award in the Kindergarten Division” of the 2023 Rating of Workplace Childcare Facilities Established by the Public Sector.



(Left) 2023.12.19 Minister Su Chun-Jung of the Directorate-General of Personnel Administration, Executive Yuan presented the trophy, and Deputy Director-General Cheng Hsiu-Jung received the award, (Right) Photos of class in Lien Yuan

Month of Promoting Occupational Safety and Environmental Protection Improves Disaster Prevention and Environmental Education Capabilities

The STSP organized a series of activities to improve industrial safety and environmental education competencies in the park, providing training related to environmental education, health promotion, and emergency response drills. The STSP also organized the “Occupational Safety Commendation and Exchange Dinner” and “Month of Promoting Occupational Safety and Environmental Protection Commendation for Excellence in EHS and Lectures,” and thanked the employees for their efforts in their posts. This allows tenant companies to give consideration to EHS while increasing production value. In addition, in order to promote the sustainable development of environmental safety in the park, fire safety experts were specially arranged to give a speech on “How tech companies can improve fire safety management and governance in the trend of ESG,” providing diverse and extensive inspiration to tenant companies.



2023.11.10 Tainan Science Park emergency response drill, an activity during the Month of Promoting Occupational Safety and Environmental Protection.



2023.10.24 Month of Promoting Occupational Safety and Environmental Protection Commendation for Excellence in EHS.

Highly Effective Promotion of Occupational Safety, “Excellent” Rating in Labor Inspection Performance

The STSP Labor Inspection Center’s scope of supervision and inspection is complete. The promotion of ESG to business entities in phases has been clearly effective, and the opening of the XR field to various institutions for visits and learning has made a significant contribution to occupational safety and health prevention. The Labor Inspection Center’s annual performance was rated as “Excellent” by the Ministry of Labor in 2023, sparing no effort in maintaining occupational safety.



(Left) 2023.3.14 Medal for “Excellent” rating in the labor inspection performance evaluation (Right) 2023.3.14, Deputy Minister Lee Jun-I of the Ministry of Labor awarded the medal for “Excellent” rating in the labor inspection performance evaluation to the STSP.

Optimize Park Efficiency and Protect Operational Safety

The STSPB explained the reason and method of the overall inspection on behalf of the three science parks in 2023, and shared implementation results in environmental protection management, chemical management, groundwater management, occupational safety, GHG, and sustainable development. Combined with static display of environmental protection teaching tools, it showed the achievements of science parks towards Innovation, Inclusive and Sustainability. In addition, the STSP cooperated with the Ministry of Labor to organize the “STSP Chinese New Year Safety Conference,” urging business entities to implement disaster prevention mechanisms by strengthening inspection, promotion, and guidance measures. The conference provided information on common labor inspection deficiencies in the past three years, analyzed the cause of occupational accidents, and provided improvement recommendations to remind business entities to take preventive measures.

There was a severe dengue fever epidemic in Taiwan in 2023. The STSP actively participated in epidemic prevention meetings, organized epidemic prevention lectures and specialized personnel training courses, and supervised the implementation of epidemic prevention operations, reminding tenant companies to strengthen mosquito prevention measures and health education promotion, in order to reduce the risk of dengue fever transmission in the science park.



(Left) 2023.1.6 Sharing during the Chinese New Year safety conference

(Right) 2023.6.20 Group photo at the presentation of overall inspection results (environmental protection and occupational safety)

Expanding Industry-Academia Services to Match Diverse Talents

A total of 10 matchmaking and exchange activities were held in 2023, and a total of 63 tenant companies and 54 colleges and universities participated. Wenzao Ursuline University of Languages organized a female tech leaders event on October 18. Female managers from Applied Materials and ASML shared their academic and career development experiences as women in the field of literary arts and non-science and non-engineering groups entering the technology industry. On October 25th, the STSP held the first talent matchmaking event in National Yang Ming Chiao Tung University to recruit talents in northern Taiwan.



2023.11.25 Group photo at the talent matchmaking event in Northern Taiwan



2023.3.18 Group photo at the STSP's Talent Recruitment in Tainan

On March 18 and August 19, 2023, job fairs were held at the Tainan City Government and Kaohsiung City Government, respectively, to solve the problem of labor shortage and unemployment. The event invited tenant companies TSMC, Wiwynn, Chieftek, RSTEC Semiconductors, Foresight Energy, Motech Industries, Taiwan Hodaka, UMC, WNC, GARUDA, King Slide, AllRing-Tech, Walsin, Ares Green Technology, Synbio Tech, and Magnate, which released 1,506 job openings. Besides providing opportunities for immediate interviews on site, the CPAS career personality aptitude system was used to help people find jobs.

Serve Companies by Optimizing Infrastructure

Completion of Link Road Construction Around the Park

East side: The “South 137 widening project” has been completed and was opened to traffic on November 24, 2023. After its opening, it eased the traffic flow on Provincial Highway 19A and diverted the commuter traffic entering the park from the east and NNKIEH, effectively shortening the travel time by about 5 minutes.

South side: The “Xingangshe Boulevard Diversion Project” is currently in the acceptance stage. When it opens at the end of February 2024, it will ease the traffic flow in and out of National Highway 8 connecting to the STSP link road, so as to facilitate the traffic flow in and out of the park on the south side, effectively shortening the travel time by about 2 minutes.



Photos of the South 137 widening project site



Photos of Xingangshe Boulevard diversion project site



Photos of the completed sixth distribution reservoir in Tainan Science Park

The Sixth Distribution Reservoir Project in Tainan Science Park was Completed

In response to the gradual increase in average water consumption in Tainan Science Park, the sixth distribution reservoir of Tainan Science Park Phase II base was completed on October 17, 2023. The distribution reservoir is located on the land Gong 26 at the intersection of Nanke 9th Rd. and Sanbaozhu Rd., and has a designed capacity of 45,000 m³. After completion, it can meet the average daily water supply of 75,000 CMD and the maximum daily supply of 90,000 CMD for advanced processes of tenant companies. It will mutually support the 4th and 5th distribution reservoirs of the park.

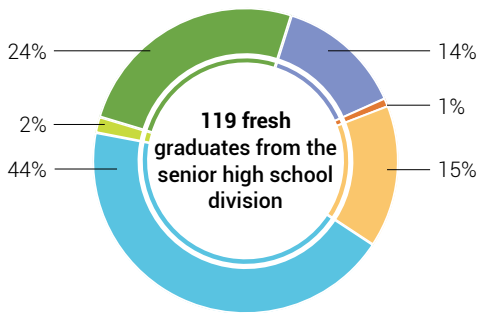
NNKIEH Continues to Achieve Excellent Performance

Brilliant Admission List of Junior and Senior High Schools

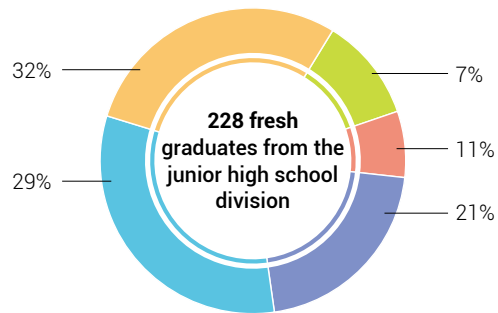
In 2023, the list of students of NNKIEH’s senior high school division accepted into universities included 1 student into the Department of Medicine, 16 students into the top five national universities, 18 students into middle-level national universities, 87 students into national universities and medicine-related departments, and 2 students into overseas universities. In the admissions list of the junior high school division, 29% were admitted to NNKIEH, TFSHS, and NTGSHS; 32% were admitted to other public high schools; 21% were admitted to public vocational high schools; 7% were admitted to five-year junior college, seven-year technology college, and military school; the remaining 11% were admitted to private schools. There were a total of 18 students in the graduating class of the bilingual department, in which 20% of the students were admitted to Taiwan’s National Tsing Hua University, National Chung Hsing University, and National Central University, and 80% of the students were admitted to Ivy League and top universities in various countries, such as the United States, Canada, and Europe.



The students with outstanding scores in the Comprehensive Assessment Program for Junior High School Students in 2023 were commended.



- Top Five National Universities
- Mid-level universities
- Department of Medicine
- Study abroad
- Other national universities and medicine-related departments
- Other



- NNKIEH, TFSHS, NTGSHS
- Other public senior high schools
- Public vocational high schools
- Five-year junior college, seven-year technology college, and military school
- Private high (vocational) schools

Robotics Team Goes International

The high school robotics team FRC6998 won the “FIRST Championships - Houston” and the “Regional Winners” and “Regional Engineering Inspiration Award” in the 2023 FRC Monterey Bay Regional. The junior high division’s FTC Robotics Team won the “Winning Alliance Award Captain” in the 2023 FIRST Robotics Competition Taiwan Regional, shining brightly on the international stage and demonstrating the achievements of scientific research and education.



(Left) 2023.4.22 The senior high division participated in the 2023 FIRST Championships - Houston.

(Right) 2023.4.22 The junior high division’s FTC robotics team participated in the 2023 FIRST Robotic Competition Taiwan Regional.

Athletes Showing Off Their Talents in Sports

The track and field team participated in the 2023 Tainan City Middle School Athletic Games and won the first place in the junior high boys division hammer throw, breaking the record of the games. The senior high division's tennis team won fourth place in the senior high boys team division of the 2023 National High School Games, and first place in the senior high team division of the 2023 Tainan High School and Elementary School Tennis Tournament. 2023 Victor.ly Cup National Junior Championships (A-4) - Won the runner-up in 12-year-old boy's singles and runner-up in the boy's doubles, the 16-year-old boy's singles champion, and the 16-year-old girl's doubles. In the Kenya Nairobi J30 and J60 International Junior Championships, won the girls doubles champion, the boy's singles runner-up, and the boy's doubles runner-up, achieving great success in sports competitions.



2023.10.19 Men's Singles Champion in the Victor.ly Cup International Junior Championships (Wang Yan-chun of NNKIEH, first from the left).

The Beautiful Sound of Wind Instruments Heard all over the Country

NNKIEH Symphonic Bands won the High Distinction Award in the elementary division, junior high school division, and senior high school division in 2022 academic year National Student Competition of Music in 2023. The Junior High Division Choir won the first prize in the Southeast Asia Group of the National Student Competition of Folk Songs. Elementary division choir won the High Distinction Award in the National Student Competition of Music, and High Distinction Award in the Minnan Songs category of the National Student Competition of Folk Songs, letting the nation hear their voices.



(Left) 2023.11.17 The elementary division choir won the High Distinction Award in the 2023 National Student Competition of Music.



(Right) 2023.11.27 The elementary division symphonic band won the High Distinction Award in the 2023 National Student Competition of Music.

Bilingual Education Facilitates International Exchanges

In line with the 2030 bilingual policy, NNKIEH became a sister school with Stafford STEMM Magnet Academy (SSMA) in Texas and actively engages in international exchanges: Teachers from a sister elementary school in Columbia in the United States came to Taiwan to participate in English course exchanges and teaching co-preparation activities. Elementary school students had a video chat with Wonchon Elementary School in Seoul, South Korea. Teachers and students from Ueno High School in Mie Prefecture came to the school to participate in scientific forums, physics exploration, and practical courses with high school students. The symphonic band organized a summer music education trip, took an art trip to the Seto Inland Sea, hired Japanese conductor Mr. Ida to guide the symphonic band, and engaged in music exchanges with Narashino Municipal Dai-Ichi (1st) Junior High School in Chiba Prefecture.



(Left) Taiwanese and American teachers jointly prepared for publication of trial teaching.



(Right) Symphonic band invited Mr. Ida for special guidance during Japan summer music camp.

Chapter 4

Energy Saving and Sustainability in the Green STSP

Sustainable Governance Towards a Net-Zero Generation

STSP Delivers Excellent Results in Energy Conservation and Sustainability

The STSPB participated in the 2023 Taiwan Corporate Sustainability Awards (TCSA), and won the highest honor for corporate sustainability reports - "Government Agency Sustainable Development Voluntary Department Review (VDR) Platinum Award" and the "Sustainability Individual Performance Award – Workplace Welfare Leadership Award." In the future, the STSP will continue to promote goals such as energy conservation and waste reduction, eco-friendliness, gender equality promotion, safety and health, and governance promotion, in order to realize the sustainability vision.

The STSP Resource Recycling Center actively improves the energy efficiency of the Center's facilities and implements various energy-saving measures. It also won the Silver Award in the "2023 Energy Saving Benchmark Award" of the Ministry of Economic Affairs. In the future, STSPB will continue to encourage tenant companies to implement energy conservation and carbon reduction, in order to achieve the 2035 vision of "forward-looking innovation, democratic inclusiveness, resilient sustainable" technology.



(Left) 2023.11.15 Minister Su Chun-Jung of the Directorate-General of Personnel Administration, Executive Yuan presented the Platinum Award and Workplace Welfare Leadership Award to the STSPB, (Right) 2023.11.29 The Resource Recycling Center won the Silver Award in the 2023 Energy Saving Benchmark Award of the Ministry of Economic Affairs, and Director-General Su Chen-Kang received the award on behalf of the center.

Working Together to Resist Droughts and Actively Save Water

The STSP Drought Response Team was established from August 27, 2022 to August 8, 2023. During the period, 6 meetings were held to actively promote water-saving measures, conduct water meter inspections for major water users in the STSP, and achieve the 5% to 8% water saving target according to standards of the Water Resources Agency. The STSP prioritized the use of reclaimed water, increasing the usage of reclaimed water 49,200 CMD, successfully enduring the water shortage crisis. The total supply of reclaimed water in Yongkang and Anping Science Parks reached 58,000 tons/day in 2023, accounting for 20% of the water used in Tainan Science Park, lowering the demand on tap water during the drought, and stabilizing regional water supply.



(Left) 2023.2.14 The first water situation meeting of the STSP Drought Response Team in the first half of 2023. (Right) 2023.5.12 Deputy Minister Chen Tzong-Chyuan of the NSTC visited the STSP Reclaimed Water Plant.

Giving Consideration to Energy Creation, Energy Storage, and Energy Conservation at the Same Time

In 2023, the park installed 10.05MW of solar photovoltaic equipment, with the cumulative installed capacity reaching 73.61MW, reducing 45,546 metric tons of CO₂e emissions per year for environmental protection. Energy storage equipment is crucial after energy creation. The STSP plans to build 26,100 kWh and tenant companies build 2,000 kWh in the park before 2027. Currently, Tainan Science Park has a 1,000 kWh energy storage facility of E-One Moli, and will gradually achieve energy storage goals. In addition, the park organized 6 energy-saving guidance sessions in 2023, saving more than 10,000 kWh of electricity annually, reducing CO₂e emissions by more than 50,000 metric tons, and implementing energy conservation and carbon reduction to reduce the park's carbon emissions. The Administration Building of the STSPB has also improved its energy efficiency by replacing the old air-conditioning system chiller and monitoring system, and installed electric vehicle charging devices in Park17 to implement energy conservation and carbon reduction.

The STSP engages in public-private partnerships for net-zero transition. UMC supported the national circular economy strategy by establishing a "Circular Economy Resource Revitalization Center" in its Fab12A, and held the groundbreaking ceremony on March 17, 2023. The total investment amount of approximately NT\$1.8 billion is invested in the latest mature technologies, which is expected to reduce waste by about 15,000 metric tons per year, and produce about 6,000 metric tons of recycled products with a production value of nearly NT\$100 million, significantly reducing the extraction of natural resources, and creating approximately 230 jobs.



(Left) Park17 electric vehicle charging station

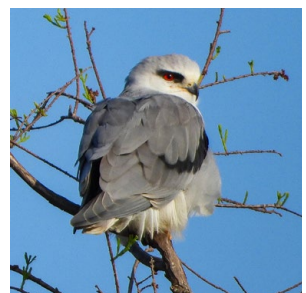
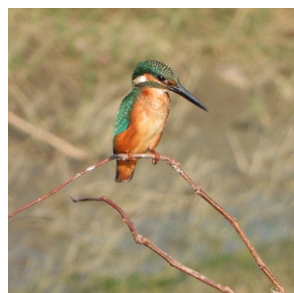
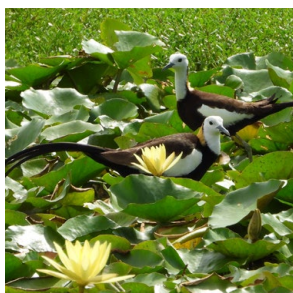


(Right) Schematic diagram of UMC's "Circular Economy Resource Revitalization Center"

Co-Prosperity with Ecology That Is Full of Life

Creating Friendly Habitats to Protect Diverse Species

Ecological protection land is planned to conserve diverse species. In 2023, 72 species of birds from 34 families, 5 species of amphibians from 4 families, 27 species of butterflies from 5 families, and 20 species of dragonflies from 3 families could be observed in Tainan Science Park; 68 species of birds from 34 families, 5 species of amphibians from 4 families, 27 species of butterflies from 5 families, and 19 species of dragonflies from 3 families could be observed in Kaohsiung Science Park. Furthermore, according to announcements of the Ministry of Agriculture, there were 7 species of protected birds in Tainan Science Park, 8 species in Kaohsiung Science Park, such as *Glareola maldivarum*, *Lanius cristatus*, *Rostratula benghalensis*, *Elanus caeruleus*, *Phasianus colchicus*, and *Falco tinnunculus*, showing excellent ecological conservation results.



(Left 1) *Hydrophasianus chirurgus*, (Left 2) *Accipiter virgatus*, (Right 2) *Alcedo atthis*, (Right 1) *Elanus caeruleus*, source: Photographed by Deputy Director of Chang Ping-Kun of UMC

Caring for Local Ecology and Conservation of Eastern Grass Owl

For the conservation of Eastern Grass Owl, areas were reserved in Ciaotou Science Park, Chiayi Science Park, and Pingtung Science Park to create habitats for Eastern Grass Owl. The 11th Eastern Grass Owl Conservation Task Force Meeting was convened on December 14, 2023 to improve various conservation measures and create a better ecological environment.



Eastern Grass Owl

Sustainability Through Low-Carbon Buildings

Energy-Saving Green Buildings for Sustainable Green Parks

The STSP actively promotes environmental protection, energy conservation, and sustainable environment, and creates a science park that coexists with ecology, saves energy and reduces waste. Currently, a total of 18 buildings in the park have obtained the Diamond-Level EEWB-EC Ecology Certification.



The new STSP plant of Green Filtec is STSP's latest diamond-level green building.



Excellent Performance in the Land Development Evaluation with Three Highest Distinction Awards

The STSPB received the highest distinction awards in the Ministry of the Interior's "2023 Building Construction Management Evaluation Plan," "2023 Construction License and Miscellaneous License-Related Management Implementation Evaluation Plan," and "2023 Building Public Safety Supervision and Evaluation Plan." Looking towards the future, STSPB will continue to improve administrative quality to maintain the operational efficiency and safety of the park.

(left) 2023 Building Construction Management Evaluation - High Distinction Award

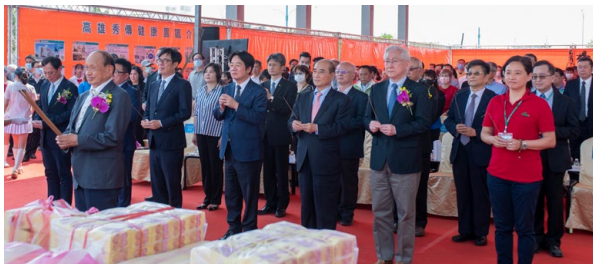
Chapter 5

Excellent Life in the Park

Create a Workplace for LOHAS in a Happy Park

Beam-Raising Ceremony of Show Chwan Memorial Hospital in Kaohsiung Science Park

Show Chwan Memorial Hospital in Kaohsiung Science Park held its beam-raising ceremony on April 14, 2023. Attendees included Vice President Lai Ching-De, former President of the Legislative Yuan Wang Jin-Pyng, Minister Wu Tsung-Tsong of the NSTC, President Huang Ming-He of the Show Chwan medical system, Kaohsiung City Mayor Chen Chi-Mai, and members of the press. The hospital is expected to be formally opened in September 2024, providing a medical capacity of 700 beds. We hope that the first large-scale regional hospital in the STSP will allow the park and communities to coexist and mutually benefit, and create a win-win situation for local communities, the hospital, and the STSP.



(Left) 2023.4.14 Group photo during beam-raising ceremony of Kaohsiung Show Chwan Memorial Hospital.
(Right) 2023.4.14 Group photo after the beam-raising ceremony of Kaohsiung Show Chwan Memorial Hospital ended.

The Presence of Chi Mei's STSP Branch Increases Medical Capacity

The Tainan Science-based Industrial Park Clinic operated by Chi Mei Medical Center has been providing medical services in the park for 23 years since 2000. In 2023, the clinic added cardiovascular medicine, gastroenterology and hepatology, psychiatry (stress relief clinic), rehabilitation, pediatric, and neurology departments. In addition, in response to the increase in population and demand for medical services in STSP, the hospital has applied for emergency, hospitalization, preventive healthcare, and occupational medicine, in order to provide comprehensive medical services. In August of the same year, the STSPB approved the establishment of Chi Mei Medical Center STSP Branch in Tainan Science Park, which is expected to provide a medical capacity of approximately 300 beds and will begin operations in 2029 to expand the provision of medical services in the park and surrounding areas.



(Left) 2023.7.12 Chi Mei Medical Center Tainan Science-based Industrial Park Clinic announced the expansion of medical services in the STSP.
(Right) Chi Mei Medical Center Tainan Science-based Industrial Park Clinic added five new medical services in May 2023.

Healthy STSP Marches Together, Tai Tzu-Ying Meets STSP Employees

On March 4, 2023, more than 3,000 STSP employees and their family members participated in the STSP hiking event, officially launching the “2023 STSP Sports Events.” The event kicked off with warm-up exercises, tenant companies were invited to set up 7 aid stations along the route to replenish water and calories for participants, so that STSP employees can walk happily and move healthily! At the same time, Tai Tzu-Ying, the best “spokesperson” of the STSP, has participated in friendly matches with badminton representatives of the STSP for six consecutive years. The series of activities such as hiking and ball games jointly care for the health of employees with tenant companies and create a friendly workplace environment.



(Left) 2023.3.4 Tai Tzu-Ying played a friendly match with the STSP’s badminton team.
 (Right) 2023.3.4 Minister Wu Tsung-Tsong of the NSTC presented a souvenir to Tai Tzu-Ying.



2023.3.4 Warm up before the thousand-people hiking event
 2023.3.4 Thousand-people hiking event



Abundant Childcare Resources Create a Friendly Workplace

In order to create a friendly childcare environment in the workplace, the STSP has supported the government's policy of promoting public education and childcare services by introducing 1 public and 2 private childcare centers, 1 private kindergarten, 2 kindergartens operated by tenant companies, and 2 non-profit kindergartens commissioned by the STSP. There are 8 kindergartens in total with an enrollment rate of 90%. The government provides venues free of charge and partial subsidies to provide affordable, high-quality, universal, and convenient childcare services in line with children's physical and mental development, thereby reducing the burden on parents and allowing them to find jobs with peace of mind.



Kindergarten students show off their art work and enjoy learning.

Taking Root in Community Education and Tour of the STSP

In order to help children of employees of the STSP Life Hub and staff of the Lien Yuan STSP Employee Children's Non-Profit Childcare Center understand the local culture, environment, and ecology, a park tour was organized in Tainan Science Park on January 31, 2023, and a park ecological tour was held on July 26. The park tour for kindergarten staff improved their understanding of the park, which will facilitate the integration of community resources and curriculum design, improve children's understanding and interaction with the community environment, and further cultivate good conduct of caring for the environment and caring for others.



(Left) 2023.1.31 Group photo of non-profit kindergarten staff during the park tour



(Right) 2023.7.26 Group photo of non-profit kindergarten staff during the park ecological tour

Conduct Visits and Make Corrections to Improve the Soundness of Operations

In order to improve industry administration and understand the actual operating conditions of factories, the Factory Correction & Operation Census was conducted from June 1 to July 10, 2023, and 239 factories in the park were surveyed and made corrections. The survey results are referenced for national industrial development and planning. The STSP was recognized for outstanding performance in the 2023 Factory Correction & Operation Census of the Ministry of Economic Affairs.

(Right) Recognized for outstanding performance in the 2023 Factory Correction & Operation Census of the Ministry of Economic Affairs.



Joyful Life Connected to Local Culture

2023 STSP Anniversary Celebration for Exceeding NT\$1 Trillion

The 2023 STSP Anniversary Celebration and Group Wedding Event was held on January 14, 2023. In the past year, thanks to the joint efforts of all sectors and driven by the IC, the STSP's turnover remained above NT\$1 trillion and is expected to reach new heights in the future, competing on the international stage. Distinguished guests gathered at the venue of the celebration, which was also the venue for a group wedding for a total of 60 newlyweds. The scene was lively, cheerful and filled with happiness. On the day of the event, artists Puff Kuo, AcQUA, Jelly Yang, and Tendrum Art Percussion Group were specially invited to perform during the celebration. There was also a garden party and a job fair, attracting nearly 4,000 people to participate.



(Left) 2023.1.14 Group photo of distinguished guests attending the opening ceremony of STSP anniversary celebration
(Right) 2023.1.14 Group wedding during the STSP anniversary celebration

Share the Good Times of Spring During the STSP Late Spring Art Festival

In addition to continuing the relaxed atmosphere of the afternoon music festival in previous years, the 2023 "STSP Late Spring Art Festival" added a variety of activities, including lakeside yoga, mutual benefit market, and DIY experiences, creating a relaxing afternoon in the spring. The "Grass Lecture Hall" event in Tainan Science Park was co-organized with Innolux, Hannstar, and UMC, which brings interactive lectures that are both educational and entertaining, allowing STSP employees and their families to enjoy the greenery of the STSP in the spring, and experience the park's exquisite, diverse, high-quality life, energy-saving, and sustainable high-quality environment. In addition, the event was extended to Kaohsiung Science Park for the first time in 2023, allowing Kaohsiung Science Park employees and residents of surrounding areas to share the beauty of the park, and expanding the scope of community-friendly services.



2023.4.15 STSP Late Spring Art Festival - Tainan



(Left) 2023.4.15 STSP Late Spring Art Festival - Tainan "Grass Lecture Hall" event
(Right) 2023.4.22 STSP Late Spring Art Festival - Kaohsiung

Christmas at STSP Fantasy Fairyland

Dazzling Christmas lights were set up at many intersections in Tainan and Kaohsiung Science Parks at the end of the year to create the atmosphere of a fantasy fairyland. Tenant companies and nearly a thousand residents of surrounding areas were invited to an early celebration of Christmas in Puxin Park in Tainan Science Park on December 21, 2023. Hot food and Christmas snacks were served at the party, and all lighting arrangements in the parks continued to shine until February 24, 2024, accompanying everyone in welcoming 2024.



2023.12.21 STSP Christmas Event



2023.12.21 STSPB arranged Christmas lights in the STSP.



2023.12.21 Clubs of NNKIEH elementary school department performed during the STSP Christmas party.

STSP Love Month Invites Everyone to Take Part in Charity

On December 2, 2023, the STSP jointly promoted STSP Love Month with "World Vision Taiwan," "Luway Opportunity Center," "Tainan City Government Social Affairs Bureau," and "Kaohsiung City Government Social Affairs Bureau," working together with public and private sectors to raise charity donations, spreading kindness to every corner of society. The activities included a charity garden party, picnic fairs, picture book storytelling, and DIY experiences. In the educational and entertaining experience suitable for all ages, philanthropists from all sectors were invited to support the spirit of STSP Love Month.



(Left) 2023.12.2 Tenant companies set up stalls for charity sales during STSP Love Month.



(Right) 2023.12.2 Group photo of distinguished guests during Love Month

Wandering Around the Ruins and Having Fun with Archeology is also Educational

In 2023, “Walking around the ruins and having fun with archeology” was planned with a series of activities such as leather carving, cyanotype, pottery making, and puzzle solving. The experiential activities and courses integrate education, knowledge, life, fun and exploration to improve people’s understanding of the STSP’s prehistoric cultural assets.



Leather carving activity



Ceramic works making activity



Roaming through the STSP ruins

Parent-Child Collaboration Activities Promote Green Energy Education

The STSP co-organized the “17th STSP’s Solar-powered Model Car Family Camp” on November 11, 2023 with National Kaohsiung University of Science and Technology, Ministry of Education Southern Solar School, and Motech Culture and Art Foundation. The paper cars designed by French paper artists promotes renewable energy application knowledge and energy conservation and carbon reduction concepts in an entertaining way. The event attracted more than 500 parents and children to participate.



(Left) 2023.11.11 Director-General Su Chen-Kang of the STSPB gave a speech at the 17th STSP’s Solar-powered Model Car Family Camp.



(Right) 2023.11.11 Group photo at the Family Camp

Chapter 6

Future Prospects

The STSP has developed complete semiconductor, optoelectronics, biomedical, and precision machinery industry clusters. Our vision is to establish the world's most valuable semiconductor science park, build a foundation to connect with the global supply chain, strengthen the resilience of regional economies, guide and assist manufacturers to invest in key technology R&D, drive industrial transformation and upgrade, optimize the competitiveness of park's industry clusters, and continue to introduce green thinking in the park to promote the co-prosperity and sustainable development of technology and the environment. The goals for 2024 and key points are as follows:

- Bring in start-ups that are conducive to the integration, application, and development of software and hardware, encourage cross-sector and cross-industry innovation and digital transformation, assist local industries in adding value to software and hardware and engaging in cross-domain integration, and drive the development of industries towards AI and higher value, enter the global industrial value chain, establish a friendly environment, strengthen local connections, establish a shared and mutually prosperous living circle, and create a southern Taiwan technology corridor.
- Encourage tenant companies to engage in R&D of innovative technologies, cooperate with the government's "Taiwan Chip-based Industrial Innovation Program" to drive groundbreaking innovation in high-tech industries, and integrate cross-departmental resources and cross-domain industry-government-academia-research collaboration, in order to use Taiwan's advantages to fill gaps in the global industrial chain and enhance the competitiveness of Taiwan's products entering the international market.
- Use AI technology to strengthen the park's digital development software and hardware infrastructure, combine technical capabilities, operational support, and industry cluster features to develop a new ecosystem of digital economic transformation services, attract global high-tech and strategic industries to set up high-end manufacturing and R&D centers, and accelerate the development of new industry clusters to serve as hubs for digital transformation, R&D, and innovation.
- Handle various public construction projects and facility maintenance in the park, build and improve infrastructure, continue to use emerging technologies to improve the park's service model, and further optimize the employment environment for tenant companies and employees; continue to work with public and private sectors to promote net-zero technology solutions to achieve net-zero emissions by 2050, and a smart park that is sophisticated, diverse, quality-living, energy-saving, and sustainable.



Chapter 7

The 2023 STSP Chronicle

- 1/** 04 — Completed the 2022 Public Facility and Road Improvement Project of Kaohsiung Science Park
- 11 — Visit from the Speaker of the Republic of Paraguay Chamber of Deputies
Opening Ceremony of Tanaka Electronics Taiwan Co., Ltd.
- 14 — 2023 STSP Anniversary Celebration and Group Wedding
- 17 — Innolux Solar Power Grid Connection Ceremony and Press Conference for Unveiling the Intelligent Circulation Liquid Crystal Extraction Center
- 18 — Former Premier Su Tseng-Chang Inspected the Planning Progress of the “Pingtung HSR Special District and Science Park”
- 2/** 07 — Visit from the Deputy Minister of Education, Science and Sports of the Republic of Lithuania and His Delegation
- 08 — Groundbreaking Ceremony of Merck Semiconductor Solutions Mega Site
- 10 — Completion of the 2022 STSP Landscape Improvement Project
- 22 — Chiayi Science Park Passed the Environmental Impact Assessment
Pingtung Science Park Passed the Environmental Impact Assessment
- 3/** 04 — The 2023 STSP Sports Serial Events-Hiking and Badminton Friendly Championship
- 14 — STSP Recognized with “Excellence” Award in 2023 Annual Labor Inspection Performance Evaluation
- 17 — Groundbreaking Ceremony of UMC’s Circular Economy Resource Revitalization Center & Recycling Innovation Center
- 18 — “Living and Working in Tainan” Job Fair - Tainan
- 23 — Completed the “STSP Tainan Science Park Management Service Center Central Air Conditioning System Function Improvement Project”
- 29 — Visit from Distinguished Guests from Klaipeda and Jonava, Lithuania
- 4/** 14 — Beam-Raising Ceremony of Show Chwan Memorial Hospital in Kaohsiung Science Park
The Ministry of Labor, Occupational Safety and Health Administration, NSTC, and STSPB Signed a Declaration on Cooperation in the XR field
- 15 — STSP Late Spring Art Festival - Tainan
- 22 — STSP Late Spring Art Festival - Kaohsiung
- 24 — Completed the Pipeline and Ancillary Facilities Functional Improvement Project of the STSP Kaohsiung Science Park
Completed the “Green 33” Green Area and Landscape Construction and Odd Projects (L31) in the STSP Kaohsiung Science Park
- 5/** 06 — Commendation Ceremony for Excellent Park Employees and Excellent Enterprises that Promote Equality in the Workplace
- 10 — Completion Ceremony for the Kaohsiung Plant of Entegris
- 19 — Pingtung Science Park Groundbreaking, Blessing, and Business Recruitment Event
Chiayi and Pingtung Science Park Development Plan and Detailed Plan Approved by the Ministry of the Interior
- 22 — Chiayi Science Park Groundbreaking, Blessing, and Business Recruitment Event

- 6/** 10 — Groundbreaking Ceremony of ATP Electronics
 15 — Urban Planning for the Tainan Science Park Expansion Plan Announced and Implemented
 16-18 — Visited the UK and France for Business Recruitment, and Participated in a Technology Exhibition
 20 — Presentation of Overall Inspection Results (Environmental Protection and Occupational Safety) of Science Parks, Tainan Science Park Phase III Groundbreaking, Blessing, and Business Recruitment Event
 29 — Groundbreaking Ceremony of ATP Electronics
- 7/** 10 — Groundbreaking Ceremony for the Kaohsiung Plant Phase II of eCham Solutions Corp.
 14 — The Executive Yuan Approved the Nanzih Science Park Preparation Plan
 25 — Opening of New STSP Plant of WNC
 26 — Completion Ceremony of New STSP Plant of Green Filtec
 27-30 — STSP Tenant Companies Participate in the 2023 Bio Asia-Taiwan
- 8/** 01-02 — Establishment and Unveiling Ceremony of the Preparatory Office for the National Experimental High School at Kaohsiung Science Park
 04 — Groundbreaking Ceremony of Rising Corp.
 17 — Opening of ASM Taiwan Tainan Training Center
 19 — “Wage Creation, Take Off, Charming Kaohsiung” Large-Scale Job Fair - Kaohsiung
- 9/** 06-08 — The STSP Leads Tenant Companies to Participate in 2023 SEMICON Taiwan
 09-17 — Attended IASP Annual Conference in Luxembourg
- 10/** 06 — Completion Ceremony of STSP Branch of Taiwan Valqua Engineering International, Ltd.
 17 — Completed the Sixth Distribution Reservoir Project in STSP Tainan Science Park Phase II
 21 — Opening of Daily Liquid Crystal Co., Ltd.
 24-11/31 — 2023 Month of Promoting Occupational Safety and Environmental Protection Activities and Commendation for Excellence in EHS
- 11/** 03 — Recognized for Outstanding Performance in the 2023 Factory Correction & Operation Census
 Ciaotou Science Park Breaks Ground for the Digital Innovation Complex Building Group
 09 — Groundbreaking Ceremony for STSP Plant 6 of Marketech International Corp.
 10 — Co-Organized the “Tainan Innolux Fab D Complex Earthquake Disaster Emergency Response Drill and Observation” with Tainan City Government Fire Bureau
 11 — 17th STSP’s Solar-Powered Model Car Family Camp
 15 — Won the 2023 TCSA “Sustainability Report Platinum Award” and “Innovative Growth Leadership Award” for Individual Sustainability Performance
 17 — Representative of Ally Country in the United Nations Leads Delegation to Visit the STSP
 29 — STSP Resource Recycling Center was Awarded the Silver Award of Energy Saving Benchmark Award
 30 — Co-Organized the “Luzhu Innolux Fab F Complex Earthquake Disaster Emergency Response Drill and Observation” with Kaohsiung City Government Fire Bureau
- 12/** 30-12/03 — Participated in the 2023 Healthcare+ Expo Taiwan with Tenant Companies
 02 — STSP Love Month Activities
 Lien Yuan STSP Employee Children’s Non-Profit Childcare Center Won the High Distinction Award in the “Rating of Workplace Childcare Facilities Established by the Public Sector”
 19 — Won the Outstanding Unit in Tainan City Environmental Protection Bureau’s 2023 Diesel Vehicle
 21 — 2023 STSP Christmas Events

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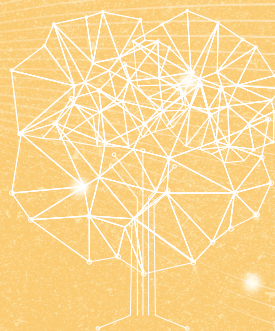
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Using colorful hand-drawn illustrations and a yellow ribbon running through the front and back covers, the natural ecology and special landscapes in the STSP unfold before your eyes, symbolizing that the efforts of all employees over the years with the STSPB at the core has created such beautiful scenery. As the STSPB keeps pace with the times, it also takes into account technological development and environmental sustainability. In an era of rapid change, the STSPB provides a stable and growing high-quality development environment for all tenant companies, moving towards the goal of "sustainable development."





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