

Talent

P47. Attracting and Retaining Talent

P56. Talent Cultivation

P69. A Happy and Safe Workplace

An Attractive Employer for Professional Talents

In order to create momentum for growth even amid continuous changes in the external environment, Nanya uses talent retention and cultivation to preserve competitive advantages. We also accept employee opinions to create a safe, human rights-based, and harmonious workplace and fulfill our business targets.

84.5%

Internal employee substitution rate
for job openings $\geq 84.5\%$

72%

The average level of approval indicated by employee survey responses reached 72%.

O

Disabling frequency rate and disabling severity rate were both 0



Strategy and Performance of Material Topics



Talent Cultivation and Development

Improvement of professional skills: Establish yearly training development plans based on the Company's strategy; plan diversified learning courses and channels.

Training of key talents: Strengthen the training of key talents and increase the proportion of key talents.

Individual development: Establish independent learning and employee personal development mechanisms to increase the internal employee substitution rate for job openings.

2022 Goals	2021 Goals	2021 Performance
Annual planned course completion rate \geq 100%	Annual planned course completion rate \geq 100%	138.9%
Percentage of key talent to total employees \geq 4%	Percentage of employees that are key talents \geq 3%	4.2%
Internal employee substitution rate \geq 62%	Internal employee substitution rate for job openings \geq 60%	84.5%
TTQS (Talent Quality-management System)	TCSA Talent Development Leader Award	Received the Talent Development Leader Award



Human Rights

Regulatory compliance: Comply with international human rights standards and apply relevant policies and standards in practice.

Protect equality: Build workplace equality by establishing risk management and precautionary measures as well as designing diversified communication and complaint channels.

2022 Goals	2021 Goals	2021 Performance
Workplace violence: 0 cases	Workplace violence: 0 cases	0 cases
Employees' educational training on labor ethics completion rate: 100%	Employees' educational training on labor ethics completion rate: 100%	100%



Talent Retention and Employee Care

Manpower stabilization: Implement talent retention plans to stabilize outstanding employees and increase the retention rate of key talents.

2022 Goals	2021 Goals	2021 Performance
Retention rate of key talent \geq 98%	Retention rate of key talent \geq 98%	100%
Voluntary turnover rate ^{Note1} \leq 5%	Voluntary turnover rate \leq 5%	7.09%
Average approval rate inf Employee Engagement Survey \geq 75%	Average approval rate inf Employee Engagement Survey \geq 73%	72%



Occupational Health and Safety

Early diagnosis and early improvement: Continuous PDCA improvements for the occupational health and safety system

Safety culture: Build employees' safety awareness and establish a high-quality safety culture

Cross-inspection: Cross-inspection by internal and external institutions to strengthen independent inspections

2022 Goals	2021 Goals	2021 Performance
Frequency of disabling injuries ^{Note2} $<$ 0.2	Frequency of disabling injuries ^{Note2} $<$ 0.21	0
Severity of disabling injuries ^{Note3} $<$ 6.8	Severity of disabling injuries ^{Note3} $<$ 7.2	0
Internal and external independent inspection rate ^{Note4} $>$ 93.8%	Internal and external independent inspection rate ^{Note4} $>$ 93.5%	99.25%

Note1: Voluntary turnover rate includes employees in Taiwan and overseas

Note2: Disabling injuries frequency rate (FR) = (total employees with disabling injuries \times 10⁶)/total work hours

Note3: Severity of disabling injuries (SR) = (total days lost to disabling injuries \times 10⁶)/total work hours

Note4: Independent inspection rate: (Number of cases reported by departments/number of discrepancies reported by safety and health units) \times 100%

Exceeded Achieved Partially achieved



Attracting and Retaining Talent

Employee Diversity

Employees are not only the most important capital to Nanya, but also the key to supporting sustainable operations and innovative R&D within the Company. We strive to create a humane and comfortable office environment where new employees are subjected to systematic training and have access to diverse learning resources to help them quickly accumulate professional knowledge and skills for the semiconductor industry, and receive reasonable compensations in return. The Company also has an Employee Welfare Committee that organizes exciting and interesting recreation activities on a yearly basis to maintain employees' work-life balance as well as physical and mental well-being, and create a sustainably healthy workplace.

We believe a competitive and stable workforce to be essential for improving the productivity and competitive advantage of the Company. We continue to design and provide an environment where talents may thrive. Through talent cultivation, we strive to become the best employer that looks after talents.

Diversified recruitment policy

Since Nanya has business operations based in Taiwan and overseas, the nationalities of the Company's employees are quite diverse. In addition to Taiwanese staff, employees of the following 14 nationalities were also hired in 2021: Chinese, French, German, Japanese, American, Thai, Vietnamese, Burmese, Italian, Kenyan, Korean, Turkish, British, and Indonesian. Our employees form an internationally diversified workplace. We had 116 foreign employees in 2021, accounting for 3.26% of all employees. Taiwanese nationals accounted for the largest proportion of employees in management levels, at 89.76%. In descending order, the top five nationalities of foreign managers were American, Japanese, German, Chinese, and French, which made up 8.89% of all employees in management levels.

Nanya also supports the government's policies of hiring people with disabilities as part of its workplace friendly diversity initiative. As of December 2021, Nanya hired a total of 36 employees with disabilities into Taiwan operations, which represented 1.05% of total employees. We continue to work towards hiring more people with disabilities and provide appropriate job positions. Through increasing job opportunities for people with disabilities, we intend to build a diversity-friendly workplace.

Year	Nationality count	Percentage of foreign employees (%)	Number of employees with disabilities(person)	Percentage of employees with disabilities (%)
2021	15	3.26%	36	1.05%
Nationalities Taiwanese, Chinese, French, German, Japanese, American, Thai, Vietnamese, Burmese, Italian, Kenyan, Korean, Turkish, British, and Indonesian				
2020	15	3.56%	36	1.05%
Nationalities Taiwanese, Chinese, Turkish, Japanese, Indonesian, French, Kenyan, USA, British, Malaysian, Indonesian, Italian, German, Burmese, Korean				
2019	11	2.96%	26	0.81%
Nationalities Taiwanese, Chinese, German, Italian, Japanese, Korean, British, USA, French, Turkish, Singaporean				
2018	10	2.95%	27	0.87%
Nationalities Taiwanese, Chinese, German, Italian, Japanese, Korean, British, USA, French, Turkish				

Note: The percentage of employees with disabilities is calculated based on the 3,444 formal employees in Taiwan.

Percentages of Management-level Employees of the Top Five Nationalities in 2021

Taiwanese	American	Chinese	Japanese	German	French
Number of Managers					
333	20	2	6	3	2
As a Percentage of Total Managers					
89.76%	5.39%	0.54%	1.62%	0.81%	0.54%
Number of people					
3,438	65	21	8	4	2
As a percentage of total employees					
96.74%	1.83%	0.59%	0.23%	0.11%	0.06%

Stable workforce

The semiconductor industry is both capital and technology intensive. It not only involves multi-billion dollar plants and manufacturing equipment, but also requires a substantial number of outstanding engineering talents to join the production team of Nanya. Nanya has a very stable workforce structure. In 2021, the Company has a total of 3,554 permanent employees in Taiwan and in overseas subsidiaries (including 77 interns), in which 86.52% are specialists^{Note 1}. The Company has also hired 42 informal employees^{Note 2}. Overall, the Company has a competitive, healthy and growing talent base to support development of innovative production procedures, technologies and products. Nanya has 3,444 formal employees in Taiwan, accounting for 96.90% of all employees; overseas subsidiaries have 110 formal employees, accounting for 3.10% of all employees. Formal male employees totaled 2,572 (accounting for 72.4%), whereas formal female employees totaled 982 (accounting for 27.6%), representing a gender ratio of 2.64 (male) : 1 (female). The average age of the Company's employees was 37.61 years old. The 30-50 age group was the most dominant of all, representing 69.70% of total employee size. Most employees had a bachelor or master's degree. All formal and informal employees are directly hired by the Company. The Company did not hire any part-time staff in 2021 and 100% of its employees worked on a full-time basis.

Statistics of employees in Taiwan and overseas subsidiaries in 2021 by age

	Taiwan				Overseas subsidiaries			
	Female	As a percentage of total females in Taiwan operations	Male	As a percentage of total males in Taiwan operations	Female	As a percentage of total females in overseas operations	Male	As a percentage of total males in overseas operations
Under 30								
Formal employees	153	15.90%	616	24.82%	3	15.00%	19	21.00%
Informal employees	12	100.00%	20	66.67%	0	0.00%	0	0.00%
30-50								
Formal employees	758	78.79%	1,674	67.45%	9	45.00%	36	40.00%
Informal employees	0	0.00%	4	13.33%	0	0.00%	0	0.00%
Over 50								
Formal employees	51	5.30%	192	7.74%	8	40.00%	35	38.89%
Informal employees	0	0.00%	6	20.00%	0	0.00%	0	0.00%

	Total					
	Female	As a percentage of total female employees	Male	As a percentage of total male employees	Male and Female	As a percentage of total male and female employees
Under 30						
Formal employees	156	15.89%	635	24.69%	791	22.26%
Informal employees	12	100.00%	20	66.67%	32	76.19%
30-50						
Formal employees	767	78.11%	1,710	66.49%	2,477	69.70%
Informal employees	0	0.00%	4	13.33%	4	9.52%
Over 50						
Formal employees	59	6.01%	227	8.83%	286	8.05%
Informal employees	0	0.00%	6	20.00%	6	14.29%

Note 1: "Specialist" refers to offline production personnel.

Note 2: Non-permanent employees include consultants, contract staff, and interns.

In 2021, Nanya had 24 female mid-level managers, which accounted for 12.50% of all mid-level managers; there were also 3 female senior-level managers, representing 5.36% of all senior-level managers; there currently are no entry-level female managers. Due to the special nature of the semiconductor industry and realities concerning talent supply, males still dominated the management roles. As for production line management roles such as team leader and shift leader, females accounted for as high as 93.14% and had significant influence on the productivity of Nanya. There were a total of 114 female managers in section chief-grade management in revenue-generating departments, which accounted for 36.89% of total managers.

Number and Percentage of Female Staff in the Last 4 Years Note 1-4

2018		2019		2020		2021	
Number of females	Percentage of females	Number of females	Percentage of females	Number of females	Percentage of females	Number of females	Percentage of females
Total employees							
925	28.74%	930	28.12%	973	27.47%	982	27.63%
Management level (A+B+C)							
115	34.64%	114	35.63%	116	33.72%	122	33.61%
Senior manager (A)							
3	5.66%	3	6.00%	3	5.45%	3	5.36%
Mid-level manager (B)							
22	13.02%	23	14.20%	23	12.85%	24	12.50%
Entry-level manager (C)							
90	93.75%	88	93.62%	90	93.75%	95	93.14%
Head of revenue-generating department (management level)							
109	41.13%	106	39.55%	108	37.11%	114	36.89%
Females working in STEM-related positions							
339	14.53%	360	14.84%	411	15.54%	428	15.92%

Note 1: Managerial role refers to senior managers (plant manager, director and above), mid-level managers (department manager and section manager), and entry-level managers (team leader and shift leader).

Note 2: Revenue-generating department refers to any department other than planning, administration, operational support, quality assurance, legal affairs, and safety & health departments. Heads of revenue-generating departments are included in the number of entry-level managers.

Note 3: STEM: Job positions related to science, technology, engineering, and mathematics.

Note 4: The number people and percentage in 2019-2020 was revised, but the statistical method was not changed.

Attracting top talents

The Company adopts recruitment policies that comply with labor regulations in Taiwan as well as its own ethical employment principles. The Company strives to provide equal employment opportunities and environment, and recruit talents solely based on individual professional capabilities and experience without discrimination whether in terms of age, ethnicity, gender, sexual preference, religion, political association, place of birth, marital status, appearance or disability. Employees' promotion, performance evaluation, training, reward and discipline after hiring have been explicitly stated in policies. This gives everyone job and training opportunities in a fair manner.

NANYA invested approximately NT\$2.11 million to expand talent recruitment in 2019, in which NT\$450,000 was used for the design and woodworking for the booth set up on the campus of National Taiwan University, and average talent recruitment expense per person was NT\$6,855.

In 2021, 243 engineers were recruited into Taiwan operations to support organizational transformation and transition into advanced production processes. The Company recruits entry-level engineering talents through factory sites and campus recruitment programs. The Company approaches renowned local colleges each year to recruit engineering talents with various skill levels and matches them to open positions on-site. We invested approximately NT\$1.28 million in recruiting in 2021, averaging NT\$3,573 per person. Due to the impact of COVID-19, the Company only participated in 15 college recruitment events in 2021. The Company approached campuses and engaged young students in a series of interaction, communication and discussion based on the theme "You be the Leader of the Future". It is our hope to encourage all willing students to pursue a dream career in the high-tech industry and contribute to semiconductor development in Taiwan. Recruitment of entry-level production line operators is carried out with the help of local employment service stations near the Company's plants. On-site interviews are held from time to time, and local residents are hired as a priority to promote local employment. Managers of Taiwan operations consist entirely of Taiwanese nationals for 100% localized hiring.

Most campus talent recruitment events were canceled in 2020 due to the pandemic, so the number of events significantly decreased. The pandemic subsided in 2021, schools organized campus talent recruitment events online, and invited companies to participate in the events. We allocated funds for advertising on job banks to maintain high exposure of campus talent recruitment events, increase exposure of job openings, and gain an advantage in the severe competition, thus improving our brand image as an employer.

Statistics on recruitment costs from 2018 to 2021

2018	2019	2020	2021
Total recruitment costs (NTD)			
1,642,395	2,118,234	820,261	1,286,210
Total number of recruits			
539	309	483	360
Average recruitment cost per person (NTD)			
3,047	6,855	1,698	3,573



Nanya talent
recruitment video

Campus recruitment snapshots



In order to promote the development of the semiconductor industry and company operations, Nanya proactively recruits new employees into the Nanya big family. Company employees work cooperatively to move forward together. New recruits accounted for approximately 7.6% of the Company's total employees in 2021. Gender distribution of new recruits was approximately 4.19 (male):1 (female)

Statistics on new recruits of Taiwan and overseas operations from 2018 to 2021

	2018	2019	2020	2021
Number of new recruits	405	238	374	270

Statistics on new recruits in Taiwan and overseas in 2021

	Female		Male		Total	
	Number of people	Percentage (Note 2)	Number of people	Percentage (Note 3)	Number of people	Percentage (Note 4)
New recruits ^{Note 1}						
By region						
Taiwan	51	5.30%	208	8.38%	259	7.52%
Overseas subsidiaries	1	5.00%	10	11.11%	11	10.00%
Age group						
Under 30	41	26.80%	174	28.25%	215	27.18%
30-50	11	1.43%	40	2.34%	51	2.06%
Over 50	0	0.00%	4	1.76%	4	1.40%
Management level						
Senior manager	0	0.00%	0	0.00%	0	0.00%
Mid-level manager	0	0.00%	0	0.00%	0	0.00%
Entry-level manager	0	0.00%	0	0.00%	0	0.00%
Total new recruits	52		218		270	
As a percentage of all permanent employees	1.46%		6.13%		7.60%	

Note 1: New recruits refer to personnel hired and remained employed in 2021 (excluding those who resigned during the year)

Note 2, 3, 4: The denominator is the number of employees in the group



Talent retention

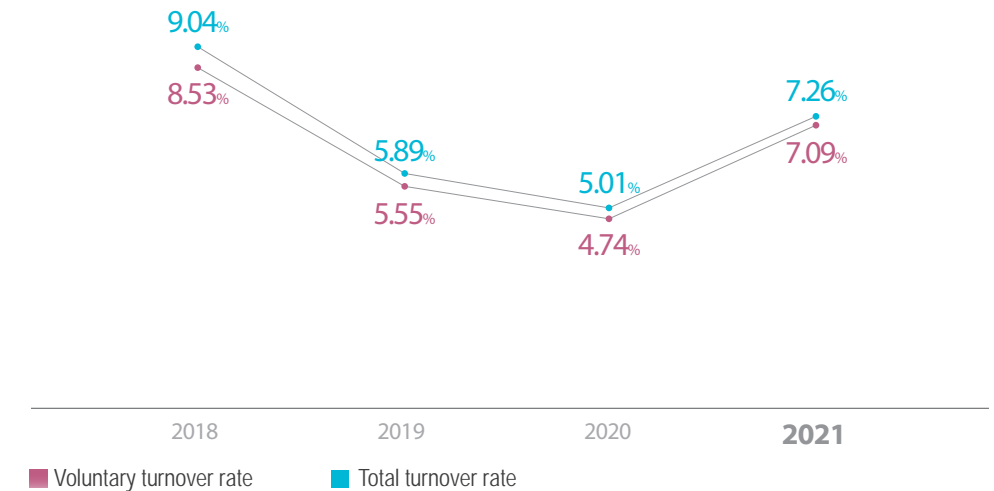
Nanya not only offers salary packages that are competitive for the semiconductor industry, but also introduces a full range of welfare measures and training systems that address employees' needs on all aspects from work, life to health. It is the goal of the Company to create a work environment where employees may realize their full potentials with a peace of mind, and for which we have implemented an employee assistance program as part of our corporate social responsibilities.

Enhanced work security – turnover rate

In response to changes in the industry and challenges in the business environment, the Company continues to not only push for fairness and reasonableness in various operations, but also prioritize the work rights and interests of employees. Under the human resource coordination system of the Formosa Plastics Group, employees are transferred first before they are made redundant. Transfer and redundancy of employees are announced and notified in advance in accordance with the Labor Standards Act and relevant laws, whereas department managers would also communicate fully with the employees in question and execution decisions in accordance with law. In order to motivate employees to achieve organizational goals and retain outstanding talents, the Company uses a quarterly incentive system to not only encourage employees to actively reach for business goals, but also share company profit.

With a favorable working environment and lifestyle security, Nanya has won the trust and recognition of employees. The Company continues to promote various retention and incentive measures—including employee stock warrants, employee bonuses, incentive bonuses—to manage employee turnover risks and effectively retain talents. The voluntary turnover rate in 2021 was 7.09% (the male to female ratio of those who resigned is approximately 4.19:1). Compared to the voluntary turnover rate of 4.74% in 2020, there was a 2.35% increase in 2021. Semiconductor manufacturers expanded their production capacity in response to market demand due to the pandemic, and offered appealing benefits to attract talent. Even if external pull strengthens, the Company adjusted the starting salary of unexperienced new recruits, made an annual salary adjustment for all managers and employees, and made structural adjustments to the salaries of special departments and specialists in July 2021. The margin of adjustments was higher than competitors, and epidemic prevention measures implemented during the outbreak allowed employees to work in a happy and safe environment. Hence, even though the Company's turnover rate increased, it was still lower than competitors. For employees who have the intention to leave, the Company conducts interviews with them one by one to understand the reasons for their resignations and future plans; the Company also provides relevant suggestions based on employee needs.

Analysis of turnover rate in Taiwan and overseas in 2018-2021



Note1: Calculating formula for turnover rate = (number of resignations in January/total number of employees at the end of January) x 100% + (number of resignations in February/total number of employees at the end of February) x 100% + ... + (number of resignations in December/total number of employees at the end of December) x 100%

Note2: Voluntary separation refers to resignation initiated by the employee. The Company calculates turnover rate mainly based on voluntary separation. Total turnover rate includes voluntary (including retirement) and involuntary separation (including dismissal, redundancy, death etc.)

Note3: In 2019, the calculation of turnover rate began excluding direct interns (personnel turnover due to expiration of internship contracts).

Note4: Voluntary turnover rate began excluding those who went on unpaid leaves starting in 2020. Based on the calculation that excluded those who went on unpaid leaves, the adjusted voluntary turnover rate of 2019 was 5.55%, and the adjusted overall turnover rate was 5.89%.

Statistics on total number of employees turnover rate in Taiwan and overseas in 2021

	Female		Male		Total	
	Number of people	Percentage (Note 2)	Number of people	Percentage (Note 3)	Number of people	Percentage (Note 4)
Total number of employees separated ^{Note 1}						
By region						
Taiwan	48	97.96%	185	92.04%	233	93.20%
Overseas subsidiaries	1	2.04%	16	7.96%	17	6.80%
Age group						
Under 30	30	61.22%	102	50.75%	132	52.80%
30-50	19	38.78%	88	43.78%	107	42.80%
Over 50	0	0.00%	11	5.47%	11	4.40%
Management level						
Senior manager	0	0.00%	2	1.00%	2	0.80%
Mid-level manager	0	0.00%	2	1.00%	2	0.80%
Entry-level manager	0	0.00%	0	0.00%	0	0.00%
Total number of employees separated	49		201		250	
As a percentage of total employees ^{Note 5}	4.99%		8.05%		7.19%	

Note 1: Total turnover rate includes voluntary (including retirement) and involuntary separation (including dismissal, redundancy, death etc.)

Note 2: Percentage of employees separated that were female

Note 3: Percentage of employees separated that were male

Note 4: As a percentage of all employees separated

Note 5: The denominator is the number of employees in the group

To ensure employees' retirement-related rights and interests, for employees who choose the retirement scheme under the "Labor Standards Act", 2% of the total monthly salary is deposited into the designated Bank of Taiwan account. The accumulative labor retirement reserve in 2021 totaled NT\$540,041,197, and had been fully contributed. For other employees who choose the "Labor Retirement Pension" system, the Company contributes 6% of individual monthly salary to each employee's personal retirement account. Employees are eligible to contribute more amounts voluntarily, and the amount is deposited into the employee's retirement account along with the 6%, providing substantial retirement security.

Employee Engagement Survey

Nanya conducts an organization-wide Employee Engagement Survey annually to gain insight into employees' level of approval towards the Company on several aspects, including work, management, and organizational vision. This survey used 29 questions to collect employees' opinions on 6 aspects. It received a response rate of 93%, which was the same as 2020. The results revealed that the average level of approval from all employees was 72%, a slight increase of 1% compared to the 71% in the previous year. Observing results of the Employee Engagement Survey in 2019-2021, the slight decline in 2020 may be due to benefits being limited by the pandemic. During the severe outbreak in the second half of 2021, senior managers periodically explained the Company's epidemic prevention measures through internal mail, and employees were willing to cooperate with the measures. The Company's overall performance was not affected by the pandemic and also did not cut salaries or benefits, so approval slightly increased, but still did not reach the original standard of 73%.

	2018		2019		2020		2021	
	Male	Female	Male	Female	Male	Female	Male	Female
Individual work performance	60%	66%	60%	71%	70%	65%	73%	73%
Engagement with line manager	66%	73%	60%	73%	73%	67%	73%	70%
Understanding of corporate vision/culture	64%	72%	65%	75%	74%	70%	78%	79%
Performance of the managed team	63%	74%	63%	75%	74%	69%	74%	75%
Relationship with peers	75%	81%	71%	81%	81%	76%	79%	79%
Satisfaction with promotion/compensation	58%	65%	56%	65%	65%	59%	58%	56%
Rate of reaching average approval	68%		72%		71%		72%	
Response rate	85%		91%		93%		93%	

Note: This survey uses a ten-point system. "Average approval" refers to 7 points or more. The percentages in the columns represent the percentages of survey responses that indicated 7 points or more.

Attractive compensations

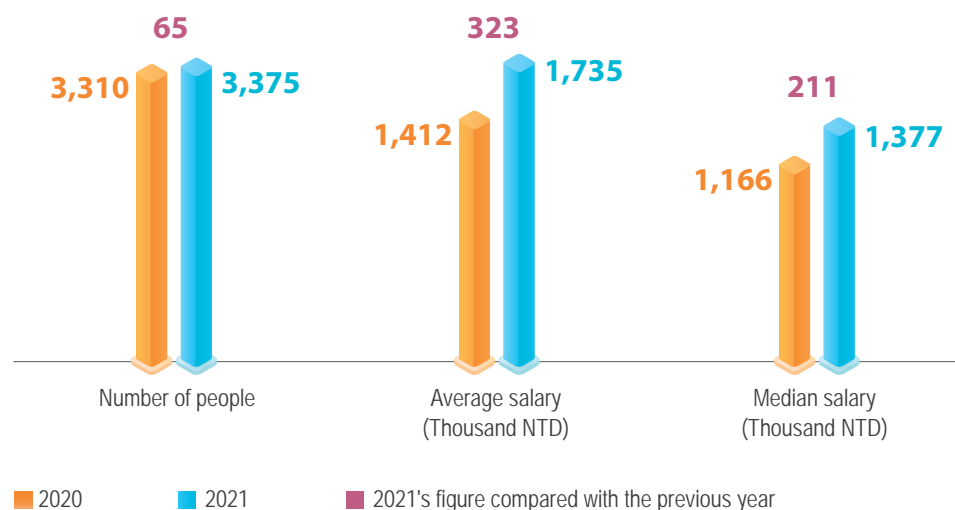
Improvement and reinforcement measures in 2021

- When the epidemic situation was the most severe, we implemented the two shifts two rotations mechanism for employees with school age children to flexibly arrange their work schedule and take care of their children.
- The outbreak caused internal and external events to be suspended, so the Employee Welfare Committee distributed gift certificates to thank employees for their cooperation.
- Planned two circular routes between Danfeng Station and A8 Station to provide employees living in Taoyuan Linkou and Taipei Xinzhuang and Taishan with a more convenient option for commuting to work.
- Communication group trainings for mid-level managers: Set up group trainings for mid-level managers to help them strengthen leadership and communication skills.
- We continued to improve promotion and compensation measures in hopes of increasing employee approval in the aspects.

Nanya's salary packages for new recruits are determined based on individual educational background, salary standards in the industry, local economics, and supply/demand of the local labor market, and they are outlined in employment contracts. Employees of similar job role, education and career experience are remunerated with equivalent salaries and benefits without gender difference of any kind. Adjustments to employees' salaries and benefits are evaluated primarily based on work performance.

The Company's compensation and welfare systems have been developed through local salary surveys and discussions with regional salary associations, after taking into account factors such as industry competitiveness, macroeconomics, corporate culture and business sustainability. This process ensures the competitiveness of our overall salary package. Monthly salary include base salary, food/transportation/region-based allowance, operational allowance, and efficiency bonus. We also offer additional bonuses and variable compensations based on employees' individual performance and accomplishment of organizational goals (or profitability), and in doing so, we reward employees for their excellent performance and share with them the profits we make as a group, regardless of their gender. In 2021, the average salary of non-managerial full-time employees was NT\$1,735,000, a 22.88% increase compared to 2020. The median salary of non-managerial full-time employees was NT\$1,377,000.

Non-managerial Full-time Employees



Terms of compensation that enhance talent retention

- Nanya is a composition of Taiwan High Compensation 100 Index, indicating the strong competitiveness of the Company's compensations.
- Year-end bonus, festive bonus, Dragon Boat Festival/Mid-autumn diligence bonus, grade bonus.
- Long-term incentives: Include employee remuneration, employee stock option certificates, incentive bonus and annual salary adjustments.

Employee remuneration

Subject: All permanent employees

Amount allocated to employees from previous year's earnings, subject to resolution of the board of directors and shareholders.

Employee stock option certificates

Subject: Employees conferred with warrants

Employees' rights to subscribe a certain quantity of the Company's shares at the specified price within the effective duration in the future.

Incentive bonus

Subject: All permanent employees

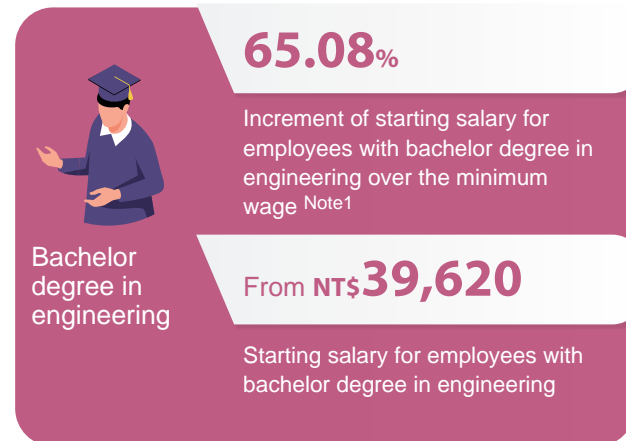
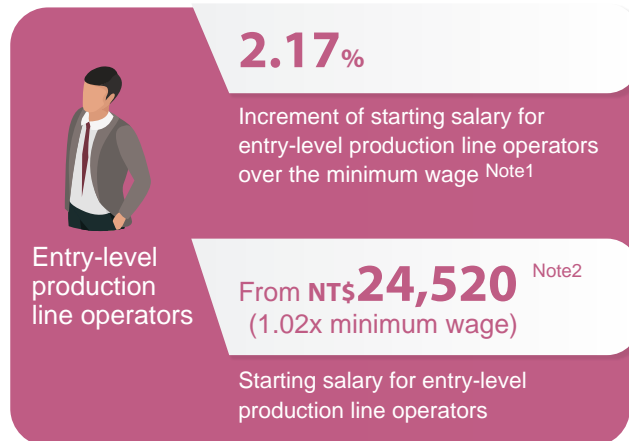
Bonus is allocated based on quarterly target accomplishment, individual performance and percentage of days on the job.

Annual salary adjustment

Subject: All permanent employees

Salary is adjusted in line with increased price level, peer standards, and competitive margin over peers.

The starting salary for male and female employees in Taiwan is the same. Female managers received slightly lower compensation on average than males in 2021. In terms of total salary package, females received 94.55% that of males on average; in terms of total salary plus remuneration, females received 94.55% that of males on average. This difference was mainly attributed to the higher average years of service among males, which entitled them higher compensation and remuneration compared to females. In 2021, female employees of non-managerial role received total salary package at 108.71% that of male counterparts on average, and remuneration at 111.47% that of male counterparts on average. Females received higher compensation and remuneration than males in this respect mainly because of their higher average years of service. Overall, the Company offers competitive compensation along with full benefits and facilities that enable employees to maintain job security and quality lifestyle.



Note 1 : The minimum wage was adjusted to NT\$24,000 on January 1, 2021.

Note 2 : The minimum wage was adjusted to NT\$25,250 on January 1, 2022, and the starting salary for entry-level production line operators was adjusted to NT\$25,250.

Compensation Between Male and Female^{Note1-4}

	2018	2019	2020	2021
Female-to-male total salary ratio of managing supervisors	-	-	-	-
Female-to-male total salary + remuneration ratio of managing supervisors	-	-	-	-
Female-to-male total salary ratio of managerial roles	88.64%	92.35%	93.72%	94.55%
Female-to-male total salary + remuneration ratio of managerial roles	92.07%	93.24%	94.91%	94.55%
Female-to-male total salary ratio of non-managerial roles	109.11%	109.02%	110.34%	108.71%
Female-to-male total salary + remuneration ratio of non-managerial roles	115.31%	113.15%	113.49%	111.47%

Note1: "Total salary" refers to the regular salary (including basic salary, efficiency bonus, meal/location/transportation allowance, operational/professional bonus, and other payable items) + grade bonus.

Note2: "Remuneration" refers to incentive bonus + employee remuneration + festive bonus + Mid-autumn and Dragon Boat Festival Diligence bonus+ year-end bonus.

Note3: "Managing supervisor" refers to assistant vice president grade and above, and the Company had 0 female senior manager in the last 3 years.

Note4: "Managerial role" refers to section chief + department head + plant/division head.



Talent cultivation

Comprehensive Talent Cultivation and Development

Talent and Talent Development Guidelines



Ideals

The Company values people and sustainability, and advocates lifelong learning while assisting employees with their career development. It is the Company's goal to create a competitive talent cultivation and development system that is suitable for the semiconductor industry.



Policies

We continue to step up talent cultivation and development to improve the quality of Company employees, optimize the training system, offer diverse courses, systematically training employees to develop proper skills, knowledge and attitude, in order to accomplish the Company's annual strategic goals.



Goals

- 2022 Goals: Key talent as a percentage of all employees $\geq 4\%$; Internal employee substitution rate for job openings $\geq 62\%$.
- 2025 Goals: Key talent as a percentage of all employees $\geq 6\%$; Internal employee substitution rate for job openings $\geq 65\%$.



System

Training quality management manual, training procedures, education/training implementation rules, structured on-the-job training policy, on-the-job training management policy, internal instructors training policy, mid-level management and executive talent cultivation policy, and training materials management policy.



Implementation

Devise and execute annual talent cultivation and development plans according to corporate strategies, and implementation indicators are reviewed monthly. On a quarterly basis, senior executives and members of the Talent/Training Development Committee come together to review the plan implementation progress and the effectiveness of talent cultivation and development efforts.

Co-learning Gathering –We Together, We Learn, We Grow

The Company continued to provide employees with better and more effective talent development programs during the COVID-19 pandemic, and constantly upgraded and improved the Company's overall talent development and training system. We strengthened functions of the Talent Development Committee, linked together training, promotion, performance, penalty and rewards management systems. After implementing internal and external cultivation programs under the theme [Talent "Smart" Incubator] and [Intelligent "Dream" Factory] we used the theme [Co-learning Gathering – We Together, We Learn, We Grow] for talent cultivation in 2021. We implemented a learning cycle that covers core competencies, i.e., basic abilities that are required for employees, and provided new employee orientation and general knowledge precision courses; organizational management includes abilities that are required for managers, and include management competencies, key talent cultivation, empowerment of women, and team consensus camp. Professional skills are abilities required by employees to perform their duties and include professional competencies, AI practices, technology papers, direct personnel training sessions. Personal development is the development of individual abilities by employees, and includes Good Time to be a Girl, advanced lecturer training, on-the-job education, and cultural seminars. Training and development courses are offered according to the talent development and training system. Continue to enhance comprehensive talent cultivation and development while inspiring creativity within the organization. Through internal trainings and the knowledge management system, employees are able to engage in online and offline learning, share and generate the needed skills, knowledge, courses, and information. External trainings, seminars, technical forums, and other learning resources continue to be provided to create a learning organization and improve the overall training result.



Co-learning Gathering Cycle

Core competencies

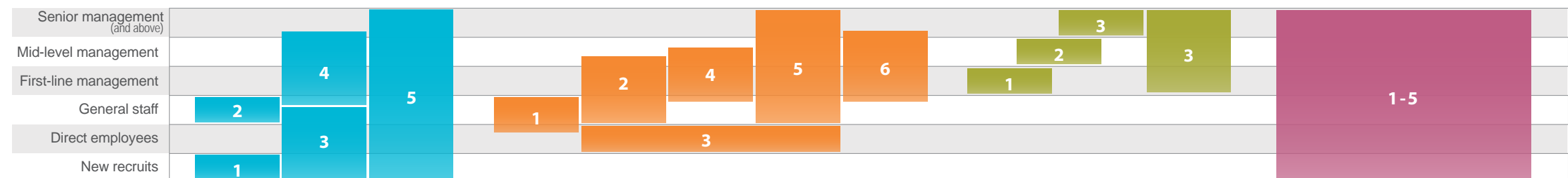
• New employee orientation

Allows employees to quickly assimilate into the company organization and culture, successfully complete basic job training requirements, and better understand the company's environment and semiconductor industry. The complete high quality training sessions for new employees and rigorous on-the-job training courses include experiences and interactive learning, which shortens the learning curve. **A total of 360 new employees were trained in 2021 to replenish personnel.**

• General knowledge precision courses

In order to meet customer requirements on product quality, required courses of policies and positions are organized according to the Company's business development strategy, and training courses are also organized according to government regulations for labor safety, environment, and health. **A total of 51,229 hours in training courses was offered in 2021.**

Talent Cultivation and Development Training System



1. Orientation camp
2. Orientation phase 2
Training and testing for new recruits
3. One-to-one mentorship on-the-job training (OJT)
4. Core values, team consensus camp
5. Policy, general knowledge, diversified themed seminar

Professional skill

• Function-based specialized training

The team consensus camp aims to establish managers' organizational leadership vision and goals, and enable them to make changes through actions to further exert influence, pragmatically motivating cooperation of cross-department teams. The Company's yearly strategy and team consensus are strengthened by the annual senior management strategy meetings and management team consensus camp. These effectively help with achieving the Company's goals. **A total of 6 sessions were held for 348 managers at all levels in 2021.**

• Artificial intelligence practices

The AI talent cultivation program provides internal training for specialized talent in AI, enhances the AI technical abilities of factory personnel, and was effectively expanded to departments in the Company, suppliers, and students. The application of AI in practical work scenarios comprehensively improves work efficiency, reduces production cost, and enhances the Company's competitiveness. **As of 2021, we cultivated 381 specialists in AI in factories.**

• Direct employee training

We planned and continued to provide direct employees with pre-job training on professional skills and machine operation skills, and periodically assess employees based on their training performance and professional skills. By adopting the trainer system and offering rewards, direct employees are given the incentive to adapt quickly to the clean room environment and join the production line at an earlier time. **A total of 68 direct employees had completed their training and obtained the machine operation certificate during the year.**

1. Employee operation qualification exam
2. Specialist training
3. Trainer's camp
4. Topic-specific training
5. Technical thesis, conference, corporate forum, seminar, etc.
6. Formosa Plastics Group specialist training

Organizational management

• Management competence training

For departments to plan on-the-job training and more effectively integrate their core competencies, we established the Regulations for the Implementation of Structured On-the-Job Training (SOJT), which lays out a clear planning process for SOJT. We also prepared learning blueprints for each position (individual) to shorten the learning curve and improve training effectiveness. This strengthened the system of each department for passing on specialized skills and create a more active workplace. **Completion of on-the-job training reached 100% in 2021.**

• Training of key talents

Comprehensive management competency training includes management competency, teamwork, strategy expertise, and diverse new knowledge. We periodically organize training courses for managers at different levels to improve the management ability and performance. Grade 1 and grade 2 management reserves participate in advanced management workshops depending on their roles. These training courses are intended to improve leadership, decision-making and adaptation of management philosophy among management reserves.

• Team consensus camp

We began to step up the cultivation of key talent in 2019, and planned comprehensive development plans for elite talent, including talent review, competency analysis, training planning, and personal development. We also actively cultivated female managers under efforts to empower women, and completed the cultivation of 125 talents (male managers: 102; female managers: 23) as of 2021, **achieving the goal for key talent to account for 3.5% of all employees in 2021.**

1. Entry-level manager
On-site supervisor training
2. Mid-level manager
3. Senior manager
Strategic planning
4. Successor, elite talent projects

Individual development

• Self-learning projects

We provide diverse learning resources and channels, including sharing events on internal training, specialized courses, contests of learning scores in events, and workshops, in order to make employees more conscious and actively learn. We are developing a learning organization through promotion, sharing, customization, competition, and incentives, changing employees' attitude from "requiring me to learn" to "I want to learn"! **The self-learning development program provided training to 6,041 participants in 2021 (up 93% compared with the previous year).**

• Advanced lecturer training

The Company has an internal training program in place to train internal instructors for the purpose of transferring corporate knowledge and building training capacity. The Company has trained a total of 319 internal instructors, and 24 were newly certified in 2021. As a show of gratitude and encouragement for instructors' continuous contribution to company training and the enhancement of internal education, the Company organizes instructor commendation events every September with the support and participation of senior management. **A total of 17 top-performing and passionate instructors were commended in 2021.**

• Employee individual development

The Company formulates independent learning plans to continuously encourage employees' individual development, promote lifelong learning, and support career development among employees. Administrative resource and incentives are also offered in accordance with the Company's on-the-job training policy to encourage continuous learning. In 2021, a total of 726 people engaged in on-the-job degree programs, and the internal employee substitution rate for job openings was calculated at 84.5%.

1. On-the-job education, external training, external assignments, job rotation (training) and promotion
2. Club activity, healthcare, investment seminar etc
3. Individual development plans, key talents, key talent evaluation
4. Cultural quality development, instructor training
5. Language proficiency improvement series

To ensure effective control of materials used internally by various departments for Structured on-the-Job Training (S-OJT), the Company has established a set of training material management guidelines and integrated it with the approval process of the knowledge management system so that the training materials are managed, updated, accessed and shared more efficiently through a unified portal. The system currently holds 3,147 internal training materials contributed by various departments, up 22% compared with the previous year.



Management team consensus camp – Robin Hood amazing potential development



Self-learning – Learning master academy

► Talent Cultivation and Development Results

Despite the continued spread of COVID-19 in 2021, which interrupted the schedule we originally planned, talent development and training events were not suspended under the epidemic prevention measures, and related training indicators continued to grow. Average training hours per employee in 2021 increased 32.5% compared to 2020 and reached 41.6 hours, the highest in the past four years. Talent development and training results and indicators are described below:

2021 Employee Training Data by Age

Female			Male			Total
Under 30	30–50	Over 50	Under 30	30–50	Over 50	
Number of employees (Persons)						
156	767	59	635	1,710	227	3,554
Person-hours of training (Hours)						
9,906	29,931	1,306	38,072	62,095	6,576	147,886
Average training hours per person (Hours)						
63.5	39.0	22.1	60.0	36.3	29.0	41.6
Training expense (NTD)						
378,472	2,318,673	238,269	1,535,460	5,143,505	1,009,309	10,623,688
Average training expense per person (NTD)						
2,426	3,023	4,039	2,418	3,008	4,446	2,989

Note1: Employee training hours do not include training under one-to-one mentorship

Note2: Managerial role refers to a position in the management level, including entry-level managers (team leader, shift leader), mid-level managers

2021 Management Training Data by Level

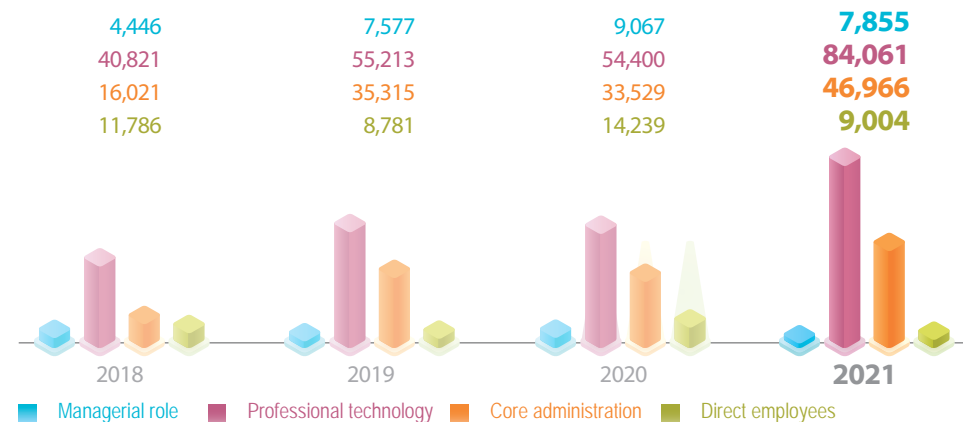
Female			Male			Total
Entry-level manager	Mid-level manager	Senior manager	Entry-level manager	Mid-level manager	Senior manager	
Number of Managers (Persons)						
95	24	3	7	168	66	363
Person-hours of training (Hours)						
1,075	653	76	79	4,368	1,604	7,855
Average training hours per person (Hours)						
11.3	27.2	25.5	11.3	26.0	24.3	21.6
Training expense (NTD)						
224,862	560,032	66,117	16,569	3,290,318	1,229,413	5,387,311
Average training expense per person (NTD)						
2,367	23,335	22,039	2,367	19,585	18,627	14,841

Average Employee Training Time by Category

Unit: hours

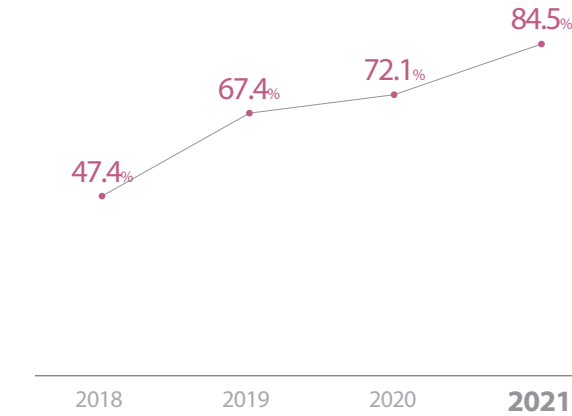
	2018		2019		2020		2021	
	Female	Male	Female	Male	Female	Male	Female	Male
Managerial role	13.2	13.7	22.8	22.8	33.5	29.3	20.0	22.5
Professional technology	23.5	24.3	30.6	31.7	26.7	26.9	40.8	41.0
Core administration	26.5	25.7	57.5	55.9	52.2	50.8	72.5	70.6
Direct employees	20.2	19.9	14.8	14.5	27.7	27.2	19.3	18.0

Total hours



Note: Independent learning was strengthened, individual development plans—including professional capability expansion, diverse lectures, and language skills—were provided, so "administrative support" shows increased numbers.

Employee substitution rate (%)



Employee substitution rate (%) = number of internal opening substitution of the year/total number of internal job openings of the year*100%

In order to effectively connect the Company's strategic goals with training implementation, Donald Kirkpatrick's training evaluation model is adopted to evaluate the performance of each training courses. The definitions of the KPIs for each criterion (L1-L4) are established, and the Company's operational strategic goals are linked with L5—return on investment. Post-learning outcomes are assessed to comprehensively evaluate training effectiveness.

Statistics on the number of internal employee substitution for job openings in 2021

	Female	Male	Total
Age group			
Under 30	6	11	17
30-50	7	37	44
Over 50	0	10	10
Job Level			
Management level (A+B+C)	0	8	8
Senior manager (A)	0	2	2
Mid-level manager (B)	0	6	6
Entry-level manager (C)	0	0	0
Non-management level	13	50	63

Item	KPI-2021 Goals	2021 Achievements	KPI-2022 Goals	Item	2018	2019	2020	2020	2021 Goals	points (10-point scale)
L5 (Return on Investment)										
• Human capital rate of return	• Human capital rate of return ≥ 12.5 (According to company goal of the year)	• Human capital rate of return 16.7	• Human capital rate of return ≥ 12.5 (According to company goal of the year)	• Human capital rate of return ¹	20.8	11.9	12.8	16.7	>12.5	10
				• Return on personnel training investments ² (%)	799	313	894	1,196	-	-
L4 (Results Evaluation)										
• Employee promotion rate	• Employee promotion rate ≥ 16%	• Employee promotion rate: 16.64%	• Employee promotion rate ≥ 16%	• Employee promotion rate(%)	16.12	16.13	16.81	16.64	>16	10
• Employee substitution rate	• Employee substitution rate ≥ 60%	• Employee substitution rate: 84.5%	• Employee substitution rate ≥ 62%	• Promotion rate of employees with <3 years of service(%)	3.67	4.35	4.11	5.59	-	-
• Retention rate of key talents	• Retention rate of key talent ≥ 98%	• Retention rate of key talents: 100%	• Retention rate of key talent ≥ 98%	• Promotion rate of employees with ≥ 3 years of service(%)	12.45	11.77	12.7	11.05	-	-
• Result publication (patent count, national award)	• Result publication (no. of patents proposed ≥ 350)	• Result publication (no. of patents proposed: 465)	• Result publication (no. of patents proposed ≥ 350)	• Total employee turnover rate(%)	9.04%	6.27	5.01	7.26	<6	8
• Productivity, sales value (volume)	• No. of improvement proposals ≥ 120	• No. of improvement proposals: 214	• No. of improvement proposals ≥ 120	• Turnover rate of key talents(%)	-	0	0	0	<10	10
• Improvement proposal				• Turnover rate of new employees(%)	21.12	15.25	7.47	9.4	<12	10
				• Employee substitution rate(%)	47.4	67.4	72.1	84.5	>60	10
				• Patent count(Cases)	502	459	438	465	>350	10
				• Improvement proposal(Cases)	51	225	228	214	>120	10
L3 (Behavioral Evaluation)										
• Customer satisfaction	• Customer satisfaction score ≥ 90	• Customer satisfaction score: 93.8	• Customer satisfaction score ≥ 91	• Customer satisfaction(points)	90.6	91.8	93.7	93.8	>90	10
• Projects accomplishment rate	• Project accomplishment rate: 90%	• Project accomplishment rate: 96.5%	• Project accomplishment rate: 90%	• Skill enhancement accomplishment rate(%)	100	100	100	100	100	10
L2 (Learning Evaluation)										
• Test/rehearsal	• Course pass rate ≥ 92%	• Course pass rate: 94.7%	• Course pass rate ≥ 94%	• Course pass rate(%)	94.1	92.5	93.4	94.7	>90	10
• Written report	• Total annual plan accomplishment rate: 100%	• Total annual plan accomplishment rate: 100%	• Total annual plan accomplishment rate: 100%	• Total annual plan accomplishment rate (%)	98	100	100	100	>100	10
• Operational certification										
L1 (Reaction Evaluation)										
• Post-course satisfaction	• Post-course satisfaction score ≥ 4.5	• Post-course satisfaction score: 4.59	• Post-course satisfaction score ≥ 4.5	• Satisfaction(5-point scale)	4.72	4.55	4.64	4.59	>4.5	10
• Closing report										

Note 1: Human capital rate of return = (Operating revenue - (Operating expenses - Labor costs))/Labor costs

Note 2: Return on personnel training investments = ((Net profit from training projects - Cost of training projects)/Cost of training projects)*100%

► Experience sharing: Self-learning

Self-learning projects use self-concept, improvement and development, and lifelong learning to make employees more conscious and active in learning. The goal is to create a good learning culture in the Company, and develop the Company into a learning organization. We hope to make employees more willing and capable of learning, to expand learning to professional skills at work, and for it to directly reflect on our business performance. The employee self-learning program that began in 2019 planned "self-learning master" and added "learning master academy," and "iCan · iMaker" self-learning courses in 2021. The program creates an environment with diversity, flexibility, and cross-disciplinary learning, and cultivates employees' self-learning, cross-disciplinary exploration, and lifelong learning abilities, developing a diverse learning organization through promotion, sharing, customization, competition, and rewards. This encourages employees to learn and participate in courses, and show their attitude to learn on their own. We hope that employees will show their creativity after learning knowledge, and further enhance the company's overall competitiveness and their personal development.

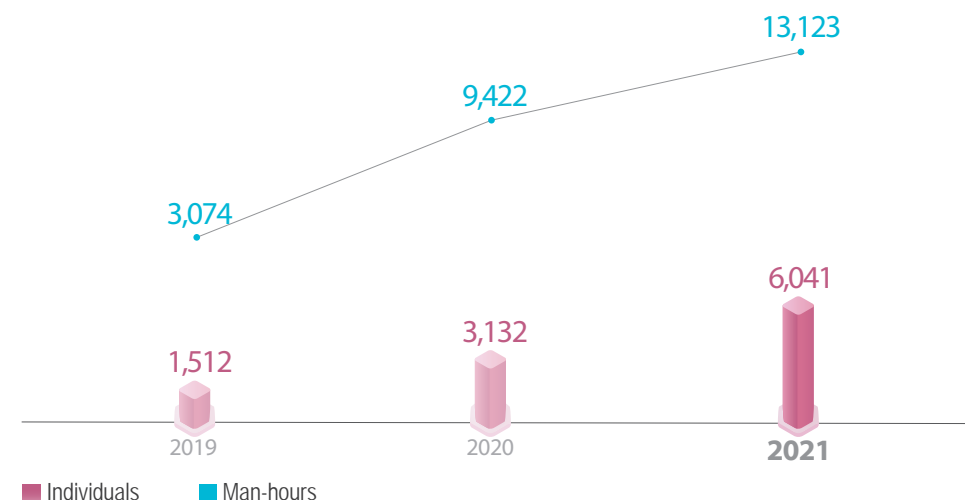
Self-learning master: Personal self-learning, show self-awareness and attitude towards learning by participating in self-learning courses. Learning masters in the first half and second half of the year are rewarded for participation in self-learning courses.

Learning master academy: Department, individual self-learning challenge; the training and development system challenges employees each quarter based on designated self-learning courses. Rewards are given to employees with a full personal score each quarter, employees with a full score each year, and department self-learning challenge reward for the department with the most employees that participated.

iCan, iMaker: This self-learning project is mainly for departments, which are allowed to design their own learning courses. The framework of iCan, iMaker is as follows:



Self-learning results (Update the figure below)



► Central Talent Cultivation & Development Plans

According to the words of the President: Employees are the foundation of a company's innovation, operations, and sustainable development. Nanya continues to drive company growth to achieve sustainable development. We continue to increase core DRAM technology development and innovation capabilities. Following the cultivation of comprehensive technology talent under [Smart Talent Factory], we used [Co-learning Gathering] as the theme of talent cultivation in 2021, and linked the Company's business strategy planning with technology projects and training and development projects. Key training and development projects and their results in the past four years are as follows:



2021 MCP technology development and sales

Employee participation rate(As a percentage of all employees)

37%

Training topic

1. Market demand analysis and development
2. Customer technology exchanges and services
3. Engineering technical support ability
4. Product production management

Importance of the project to corporate operations

Goal: Nanya becomes 1st in the world in terms of MCP market share

Engage in cross-industry collaboration to complete the first MCP of Nanya, and incorporate it in the multi-chip analysis process, as well as testing tool and program development to directly increase the Company's revenue.

Assessment of training outcome and operational benefits(NT\$)

• L1 Post-course satisfaction

Employee response: Training course satisfaction score: 4.4

• L2 Course pass rate

Employee learning: Training course pass rate: 100%

• L3 Project items achieved

Employee behavior: 1. Completed 13 experiments on the characteristics of multi-chip memory
2. Stress test time for multi-chip memory decreased 82.2%
3. Resolved 37 abnormalities on the client end
4. Added 9 products to the portfolio

Case study:

1. After market survey and customer requirements analysis, multi-chip memory was determined to have development potential and is mainly applied to IoT related network communications modules. The project developed the Company's first multi-chip memory, and will need to develop 9 multi-chip memory products. As of 2021, the product was verified by 105 customers around the world, and was adopted by 31 customers, contributing NT\$2.8 billion to revenue
2. Established the Company's multi-chip memory analysis process, and developed testing tools and procedures, saving NT\$38.8 million in machinery testing expenses
3. Established multi-chip memory debug analysis equipment, optimized RMA analysis methods and engineering technical abilities, and implemented product production management models

• L4 Performance

Performance and results:

1. Multi-chip products contributed NT\$2.8 billion to revenue
2. Multi-chip product shipment of 30.7M was the second highest in the world
3. The EVA of multi-chip products increased 10% (NT\$2.8 billion)
4. Saved NT\$38.8 million in machinery testing expenses

• L5 Return on investment

Financial value:

NT\$31.19 million(ROI: 790%)



2021 Complete organizational management talent training plans

Employee participation rate(As a percentage of all employees)

86%

Training topic

1. Strengthens the Company's core value and creates momentum for innovation
2. Eliminates selfish departmentalism and effectively manages conflicts
3. Encourages active participation by the team to continue making breakthroughs and pursuing excellence
4. Strengthen team work and enhance the competitiveness of team members

Importance of the project to corporate operations

The comprehensive improvement of management competencies includes management competency, teamwork, strategic expertise, and diverse new knowledge. It strengthens the vision and goals of managers when leading the organization, so that they will influence others through their actions and inspire the team to achieve better business performance for the Company.

Assessment of training outcome and operational benefits(NT\$)

• L1 Post-course satisfaction

Employee response: Training course satisfaction score: 4.7

• L2 Course pass rate

Employee learning: Manager pass rate for the course: 97.4%

• L3 Plan accomplishment rate Management ability evaluation

Employee behavior: 1. Project accomplishment rate: 96.5% 2. 360 evaluation approval rating: 4.5 points (5-point scale)

Case study:

1. Completed the assessment of 30 competencies and behavior of 151 key talents, and established six key competencies, including accountability, excellent innovation, bold implementation, collaboration, communication and coordination, and talent development. We analyzed the gap in competencies and planned training courses to improve personal management abilities.
2. Leaders and managers led all employees of the Company in setting management goals, which are examined on a quarterly basis. Improvement proposals were made for operations of various units in the Company. A total of 207 improvement proposals were made in 201 and provided NT\$8.83 million in actual annual benefits.

• L4 Performance Retention rate Productivity proposal Improvement proposal

Result publication:

1. Employee retention rate: 95.5%
2. Retention rate of key talents: 100%
3. 38 productivity improvement proposals raised
4. No. of improvement proposals: 214

• L5 Return on investment

Financial value:

NT\$8.83 million(ROI: 180%)



2020 Development and Sales of Application-specific DRAM Products

Employee participation rate(As a percentage of all employees)

85%

Training topic

1. Open-class specialized technical training program
2. Organization and plan management project execution training
3. Systematization of AI in production technologies
4. Marketing and sales of non-standard advanced product servers, low-power automotive-grade and industrial-grade products

Importance of the project to corporate operations

Sending all kinds of application-specific products to customers ahead of time for engineering verification enabled timely securing of a place in relevant non-standard DRAM markets. This not only increased the Company's profit but also stabilized revenue.

Assessment of training outcome and operational benefits(NT\$)

- **L1 Post-course satisfaction**
Employee response: Post-course satisfaction score: 4.4
- **L2 Course pass rate**
Employee learning: Student pass rate for the course: 95.8%
- **L3 Plan accomplishment rate**
Employee behavior: Plan accomplishment rate: 90.5%

- **L4 Productivity: Improved efficiency:**

A total of 12 product R&D/validation tasks were completed; 109 productivity proposals and 228 improvement proposals were raised.

Case study: Improve product yields and analytical efficiency

1. We efficiently lowered the manpower of yield engineering personnel and improved productivity. A total of 24 pieces of production products were implemented, and could reduce the manpower by 2.7 persons per day, equivalent to saving NT\$116,000 per month. The annual benefit totaled NT\$1.393 million.
2. The yields increased around an average of 2% during the period of implementation, accounting for 20% of the annual benefit. Based on the calculation formula of wafer sales benefit, the benefit reached NT\$134.34 million.

- **Output volume:** Sales of non-standard products > 135M pieces

L4 Performance

- **Result publication:** Patent count: 438

L5 Return on investment

Financial value:

NT\$96.67 million(ROI: 1316%)



2020 Precise skill improvement training program

Employee participation rate(As a percentage of all employees)

77%

Training topic

1. Strengthen professional capabilities by having specific course requirements.
2. Enhance organizational efficiency through practical utilization of professional capabilities
3. Create employee experience and diverse learning channels
4. TTQS evaluation

Importance of the project to corporate operations

Effective training programs were formulated, and precise curriculum designs were used to enhance training effectiveness. Technical capabilities were also utilized practically to upgrade employees' professional knowledge and capabilities, and increase patent output, production improvement proposals, as well as the Company's overall competitiveness

Assessment of training outcome and operational benefits(NT\$)

- **L1 Post-course satisfaction**
Employee response: Post-course satisfaction score: 4.54
- **L2 Course pass rate**
Employee learning: Student pass rate for the course: 90.3%
- **L3 Skill improvement**
Employee behavior: Skill enhancement accomplishment rate: 100%

- **L4 Performance**

Result publication:

1. Won Ministry of Labor's TTQS evaluation - Gold
2. 109 productivity improvement proposals raised

Case study:

1. Enhance the efficiency of manufacturing equipment resumption system
The OHT-F Ratio of the manufacturing equipment automated dispatching system was improved from 86.3% to 99.6% (+13.3%).
2. Automated dispatching system saves manpower and work hours: 22.04 (hours/day), equivalent to saving NT\$118,000 per month. **The annual benefit totaled NT\$1.416 million.**

- **L5 Return on investment**

Financial value:

NT\$2.44 million(ROI: 78%)



2019 AI and smart manufacturing training program

Employee participation rate(As a percentage of all employees)

71%

Training topic

1. Bring together field experts, information specialists, and statistics specialists to jointly develop AI applications
2. Form a technical research team and launch basic/advanced technical practices and research projects
3. Training and expansion for practical project application and development
4. Establish an AI community and relevant knowledge documents

Importance of the project to corporate operations

The program established an AI-assisted high-performance production line, improved the efficiency of wafer inspections and yield analysis, enhanced process control and optimal condition prediction, elevated productivity and machine efficiency, and increased the main scenarios in which the machinery prognosis system can be applied. It helped the Company to reach a new milestone in smart manufacturing.

Assessment of training outcome and operational benefits(NT\$)

- **L1 Satisfaction**
Employee response: Post-course satisfaction score: 4.65
- **L2 Pass rate**
Employee learning: Student pass rate for the course: 99.25%
- **L3 Structured on-the-job training (SOJT)**
Employee behavior: SOJT completion rate = 100%

- **L4 Technical projects**

Employees' results:

Technical projects: Basic theoretical studies, including 22 machine learning algorithms, 11 deep learning algorithms, and 7 project research topics were completed.

- **L4 Productivity**

Improved efficiency:

1. 38 AI projects were completed as enhancements for smart manufacturing production technologies: 21 applied deep learning models, 10 applied machine learning models, and 7 applied mathematical rules

2. Benefits:

1. Labor costs: NT\$14 million
2. Contribution to revenue: NT\$176 million
3. Potential benefit of productivity: NT\$50 million

- **L5 Return on investment**

Financial value:

NT\$2.4 million(ROI: 56%)



2018 Training program for advanced procedure/niche DRAM development

Employee participation rate(As a percentage of all employees)
85 %

Training topic

1. Training on advanced procedures/new procedures/niche products
2. Conference skill training for project managers
3. Managerial skill training for managers
4. Training for the improvement of training program

Importance of the project to corporate operations

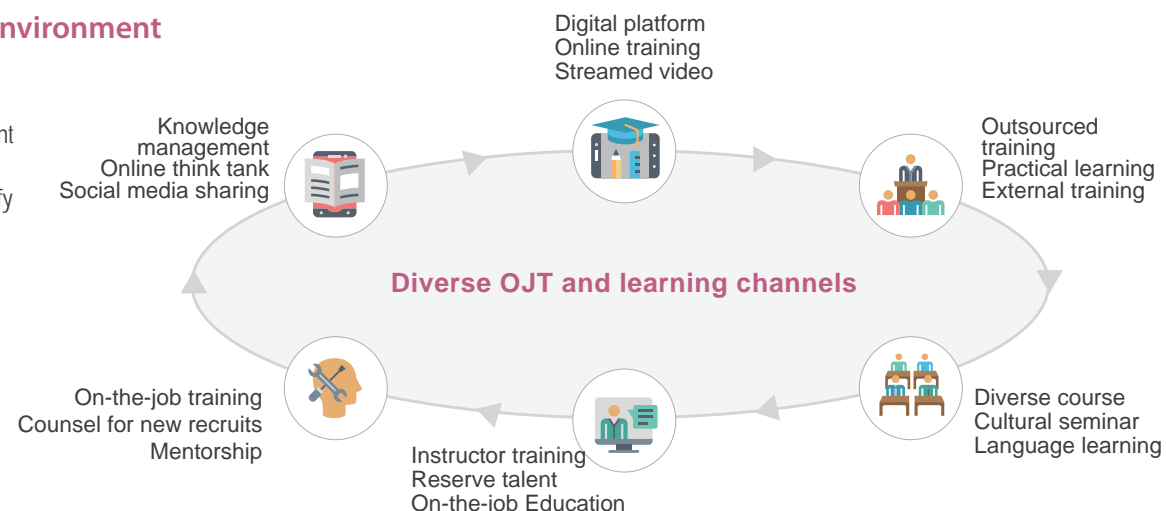
As the Company progresses into the next-generation production procedure (20nm), new marketing and product strategies are required to support development of this advanced procedure as well as demand for niche DRAM products. This training program has the potential to improve the Company's product competitiveness and stabilize product margins.

Assessment of training outcome and operational benefits(NT\$)

- L3 Structured on-the-job training (SOJT)
Employee: SOJT completion rate = 100%
- L4 Productivity
Improved efficiency:
A total of 239 product R&D/validation enhancement/advanced procedure adoption/productivity improvement tasks were completed, and 51 improvement proposals were raised.
- L4 Productivity
Output volume:
>950M
- L5 Return on investment
Financial value:
NT\$20.45 million(ROI: 783%)

► Diverse learning paths and environment

The Company has planned diverse learning channels and a complete environment for talent cultivation, life-long learning, and employees' individual development plans, in order to satisfy employees' needs for diversified learning.



E-learning audio visual center

e-Learning was already the direction for training before the pandemic, and in addition to providing employees with a self-learning environment, we provided better learning channels for employees to preview/review lessons, as well as more flexible learning paths and environment. In the audiovisual center of the Company's internal training and development center, we provided 174 digital courses in the e-learning environment in 2021, and online training and reading hours reached 65,050 hours.



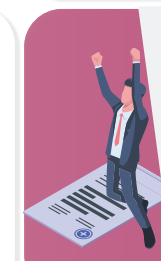
On-the-job degree programs

In addition to industry-academia collaboration and technology development projects, the Company also offers subsidies and incentives through its on-job training policy to encourage employees' participation in tertiary education outside work hours. To date, a total of 726 employees have attained a new degree through on-the-job education programs, including 201 associate degrees, 390 bachelor degrees, and 135 master's and doctoral degrees.



Language learning subsidy

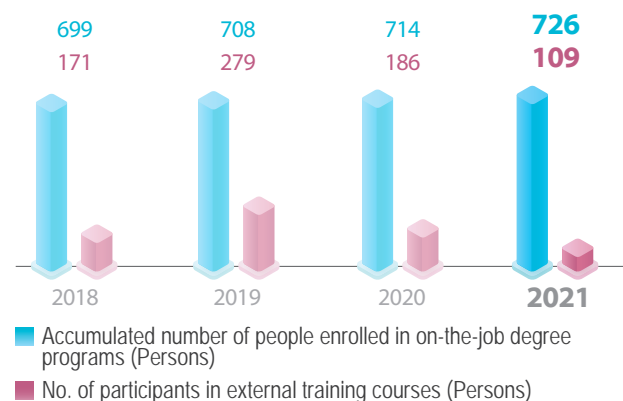
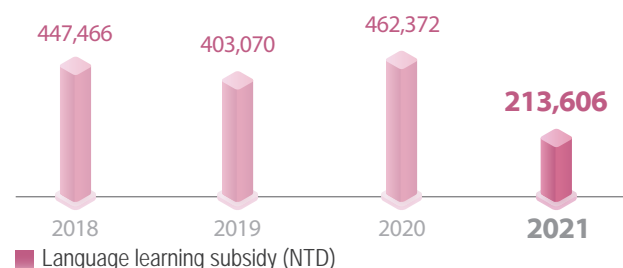
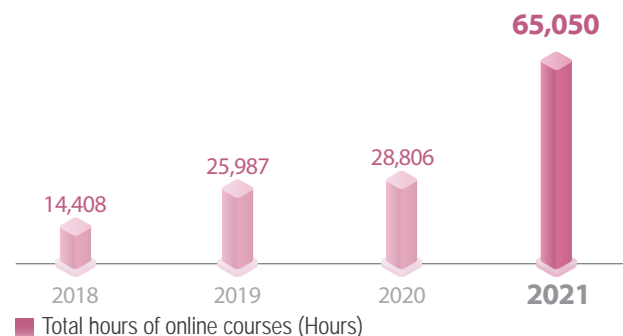
The Company provides a variety of English training channels under the "Language Learning Plan", including on-site TOEIC exams, internal English courses, online courses, and external courses. The Company also has a "TOEIC Exam Simulation System" set up for employees to practice for exams. Simulation exams are organized internally to prepare employees for the real event. The Company has established associations between TOEIC results and personnel assignment as well as promotion. In 2021, 2002 employees registered their TOEIC scores, with a growth rate of 9.7%.



Participation in external training courses

The Company encourages employees to expand their professional capacity and obtain certifications relevant to their works through participation in external training courses, as the knowledge is likely to benefit the Company in the form of new product development and added product value. External training courses received a total of 109 enrollments that participated in 1,194 hours in 2021.

2018~2021 Diverse Learning Performance



► Maximizing employee performance

The purpose of Nanya's performance management system is to maximize employees' potentials. In addition to providing good learning environment and implementing sound performance management systems, the Company also emphasizes productive interaction between line managers and their subordinates. Apart from annual performance evaluation, line managers are also required to engage subordinates in quarterly performance reviews. Through interaction and communication, employees are given the care and assistance they need to improve and accomplish individual as well as organizational goals.

The review process begins with the line manager breaking down organizational goals and setting individual work objectives for subordinates face-to-face, and is followed by feedbacks on the execution of work objectives and performance review at the end of the period. Between 2015 and 2021, 100% of employees that were evaluated by multidimensional performance appraisal (e.g. 180 degree and 360 degree feedback) and included in the performance ranking. Performance management tools used by the Company in 2021 included: Annual performance evaluation for all employees, quarterly general staff performance evaluation, 180- and 360-degree performance evaluations, and sustainable development evaluation for senior managers.

The 180-degree performance evaluation has included even more subjects, and used different talent development tools to provide employees at all job levels with the most suitable opinions for improving work performance. The coverage increased to 26% in 2021, increasing 2.6x compared with 2020 (coverage of the evaluation increased from 10% in 2020 to 26% in 2021). After frequent communication and coordination between section managers and above (inclusive), team leaders, shift leaders, chief engineer, project manager, and executive engineer were included in the 180-degree evaluation in 2021. Direct supervisors select 4-6 employees that have handled the operation to conduct the evaluation. The 360-degree evaluation is intended for plant and division managers and above, and involves feedbacks from subordinates on the subject's managerial skills. The items assessed by each assessment tool are shown in the table below. Employees who exhibit good performance are rewarded; for those who exhibit poor performance, the system actively reminds their line managers to direct attention and provide assistance until there is significant improvement in performance. This treatment is not differentiated by gender in any way.

Assessment Criteria of the 180-Degree, 360-Degree, Senior Management Performance Evaluations

180-degree performance evaluation

Subjects:

Plant and division managers and above/Department managers/project managers/executive engineer/Section manager/project manager/project lead engineer/Team leader/Shift leader

Assessment item:

- Work attitude
- Teamwork
- Communication skills
- Execution

360-degree performance evaluation

Subjects:

Plant and division managers and above

Assessment item:

- Excellence
- Innovativeness
- Communication
- Decision skills
- Leadership

Sustainable development evaluation for senior managers

Subjects:

Managing supervisor and above

Assessment item:

- Economic Performance
- Business Integrity
- R&D and Innovation
- Resource recycling
- Risk Management
- Talent Retention and Employee Care
- Employee growth and career development
- Sustainable management mechanism
- Greenhouse gas management and energy management under climate change
- Comprehensive customer service
- Sustainable Supplier Management
- Occupational Health and Safety
- Eco-friendly products

Expanding Memory Talent Cultivation

► Social issues we would like to resolve

With the power of academic research, we assist college students on campus to reduce the gap between the campus and workplace so that they may more quickly adapt to the workplace. At the same time, we integrate the resources of industry and academia to jointly enhance the capabilities of Taiwan's technology industry.

► Our role and methods

Outstanding Projects

To promote exchanges between the industry and academia and make good use of academic resources, we cooperate with well-known colleges on industry-academia research plans and sponsor campus activities, forming a strategic partnership. We also help colleges strengthen teacher-student interactions to improve the quality of education and enhance the competitiveness of domestic industries.

Cultivate Students

We have focused on campuses and two-way cultivation to develop internships that better meet industry needs, creating a well-rounded internship that effectively improves students' employability, and providing them with an internship platform. Interns learn cross-departmental communication and collaboration in the process and also show their professional talents. The internship aligns students with the industry's professional requirements, instills them with the right values and strengthens their abilities in the workplace, gives them the concept and ability of practical use, allows them to experience the workplace sooner, and encourages them to develop abilities in diverse aspects, preparing professional talent from an earlier stage.

Future Stars

To recruit outstanding talent and strengthen advanced R&D capabilities, we established several scholarships to encourage students to engage in academic research, make constant improvements, and put their education to use. We hope that outstanding students will continue to study in their field of interest, and enhance the semiconductor industry's competitiveness.

Understanding Projects

These projects aim to cultivate students well-versed in both theory and practice, improve students' understanding of industry developments, increase their engagement and sense of belonging, and give them the opportunity to come in close contact with companies. Students understand the semiconductor industry through on-site visits and company exchanges, and the work experience shared by their seniors help students determine their further career path. We focus on cultivating students in the field of semiconductors, and encourage students to join the family of Nanya through exposure from promotional materials on campus and the connection between events.

Speech Projects

We organize a variety of seminars or programs on campus to strengthen the connection between what students learn in school and the workplace, interacting and sharing with students face-to-face. Lecturers from industry, government, and academia who are experts on semiconductors close the gap between education and employment, and jointly create an industry course that meets workplace requirements. Basic courses are taught by school teachers in related fields, and lay the theoretical foundation of technologies for students. Core practical courses are taught by semiconductor supervisors of Nanya, and systematically pass on their practical experience to students, which closely combines theory with practice, and they use an easy-to-understand teaching method to give students new perspectives of semiconductors.

NANYA

► Major results in 2021



Future Stars

We invested NT\$2,210,000 in providing scholarships to 5 students and providing Future Stars scholarships to 9 students.



Outstanding Projects

We cooperated with 5 universities on 5 industry-academia research plans, and the invested amount totaled NT\$ 660,000.

The Company sponsored 4 campus activities with a total of NT\$ 1,290,000.



Cultivate Students

We cooperated with 12 colleges on the internship programs. A total of 193 interns worked at the plant, including 38 indirect and 155 direct staff members.



Understanding Projects

A total of 5 corporate visits were held with about 184 teachers and students participants.



Speech Projects

As industry experts, they shared their experience with key schools in northern Taiwan during 44 seminars and with a total of 2,964 attendees in 2021.

► Our footprints



Future Stars

We organize Future Stars Scholarship activities to cultivate elite talent in the semiconductor field, encourage outstanding students to concentrate on related academic research and innovative technologies, and help young college students pursue their ideals and goals for the future. Online registration is open every October, and a total of NT\$550,000 in scholarships is provided to three divisions – Ph.D, master's, and bachelors. A total of 27 students were nominated and 9 won awards in 2021.

We implemented an internship scholarship system to help students successfully find a job after graduation. After students complete their internship, outstanding students will be awarded a scholarship and become employees of Nanya after graduation. The internship is for a full academic year, and we provided scholarships to 2 students in 2021.

We sponsored 3 PhD students of National Taiwan University with scholarships to strengthen forward-looking R&D capability and carry out the development of next generation memory and advanced memory. This program provides scholarships to PhD students of National Taiwan University to encourage outstanding students studying in semiconductor-related departments.



Outstanding Projects

We cooperated with universities in 5 industry-academia research projects on semiconductor applications and technologies, as well as product design and development, and periodically discuss research directions and results to jointly set research goals. These universities included National Taiwan University, National Tsing Hua University, National Chiao Tung University (NCTU), Ming Chi University of Technology, and Chang Gung University.

We sponsor domestic institutions that actively carry out academic research on semiconductor and make concrete contributions, including electronics industry conferences, NTU System-on-Chip Center, NTUEE Camp, and NTU Graduate Institute of Electronics Engineering.

Cultivate Students

We cooperated with 12 colleges on the internship programs in 2021, and established a complete internship system to effectively enhance the employability of students; a total of 89 interns were recruited.

We successfully retained 4 interns to continue working at their internship units as full-time employees in 2021. Moreover, we matched 6 interns to other suitable departments based on their professional competence. Therefore, students could extend their internship experience, link it up with employment opportunities, show their professional competence, meet the professional needs of industry academia, and give them the correct values and improve their abilities in the workplace.

Understanding Projects

We invited teachers and students of colleges in northern Taiwan to visit our company and better understand Nanya, which will help them determine their future career path. Several of the visits were coordinated with the internship program and some students even found intern openings to utilize what they learned in school. The quality of visits to our company have improved and greatly benefited students who participated.

We sponsored the Electronics Camp organized by the NTU System-on-Chip (SOC) Center and the College of Electrical Engineering and Computer Science (EECS), which cultivates students for semiconductor research and development. Through group activities and an on-site plant visit, students gained an in-depth understanding of development trends in the semiconductor industry. Recruited students with superior engineering backgrounds across Taiwan.

In coordination with the company visits arranged by New Taipei City Employment Service Office, work with colleges in helping the youth plan their career development at an earlier stage, arrange group tours for career exploration, and thereby expand the Company's brand image.



Visit to National Keelung Commercial & Industrial Vocational Senior High School

Speech Projects

Seminars with industry experts are held in 5 colleges and offer practical skills in the workplace, jointly developing an industry course that meets workplace requirements. The seminars place equal emphasis on theory and practice, and the easy-to-understand lectures gave students new perspectives on semiconductors.

Continue to work with Ming Chi University of Technology/Chang Gung University in organizing seminars on practices in the semiconductor industry, arrange for experienced semiconductor supervisors to serve as instructors and offer courses, link students' workplace abilities to discussions on practices, strengthen students' competitiveness in the workplace, and eliminate the gap between education and employment.



Seminar on semiconductor industry practices participated by MCUT Department of Electronic Engineering (E.E. Dept.)

Talent cultivation and development has always been an important goal of Nanya, which formally announced that it will be joining "TALENT, in Taiwan" in Jan 2022 to enhance the competitiveness of talent in Taiwan.

Nanya has committed to the following matters to achieve talent sustainability:

1. We maintain employees' work-life balance as well as physical and mental well-being, and create a sustainable and healthy workplace, in hopes of becoming the best employer that takes care of talent.
2. The Company values people and sustainability, and advocates lifelong learning while assisting employees with their career development. It is the Company's goal to create a competitive talent cultivation and development system that is suitable for the semiconductor industry.

Nanya will take action to show its support, and will continue to engage in promotion and initiatives with CommonWealth Learning, Cheers, and 100 companies in Taiwan, providing better career development and future for every worker.





A Happy and Safe Workplace

Employee Care

► W.A.K.E - A Friendly Workplace with an Energized Workforce

In addition to providing salaries that are competitive for the industry, Nanya also promotes the Employee Assistance Program. It is combined with WAKE Up actions—a full range of employee benefit measures based on the themes of "wellness", "assistance", "kindness", "exercise". We hope to achieve the goal of creating a group of joyful technology talents through building a happy workplace.



Nanya happy
enterprise video



Wellness

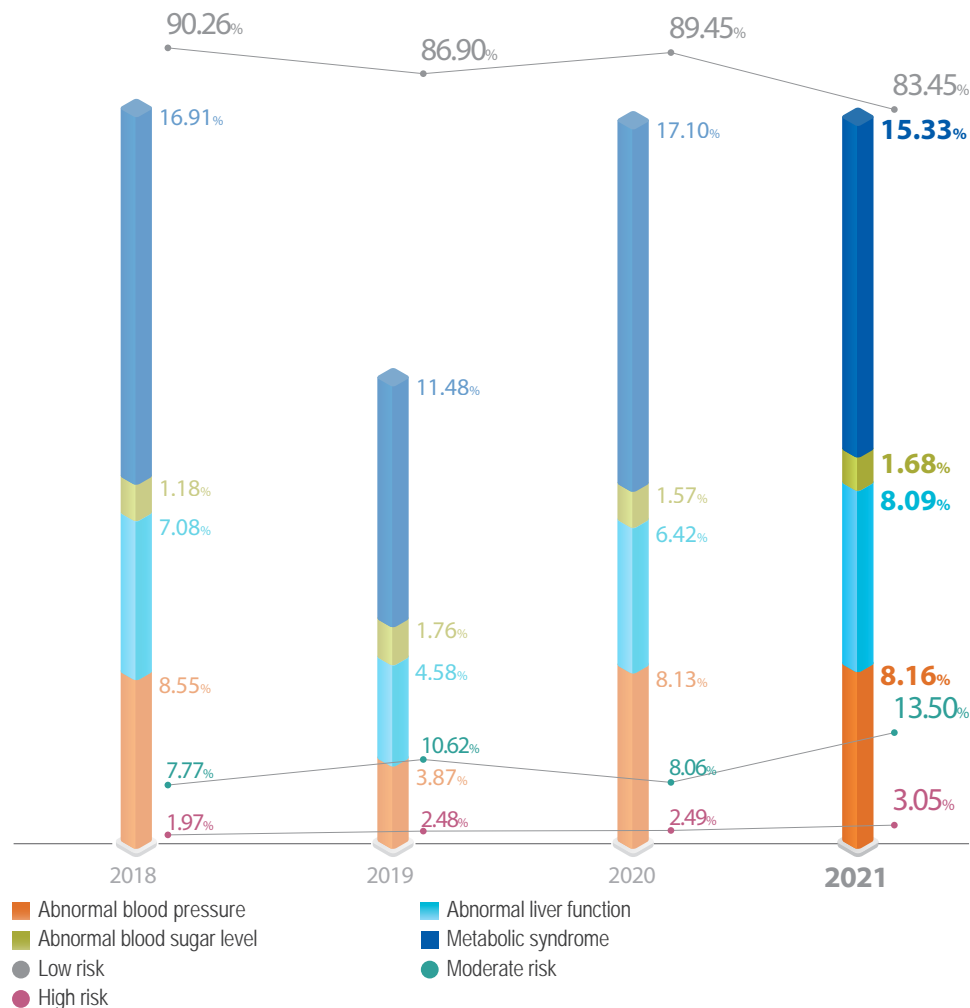


The Company collaborates with professional medical team from Chang Gung Hospital to provide annual health check service for employees. A total of 1,311 employees had completed their health checks in 2021, for which the Company incurred total expenses of NT\$2,016,504 in expenses. Employees who exhibit abnormal health check results are tracked on an ongoing basis and subjected to health management. All of our factories have a medical room with a physician stationed on site to provide employees with professional medical and consultation services. Seminars on spirituality and health and healthcare courses are arranged each quarter to meet employees' need for knowledge on physical and mental health.

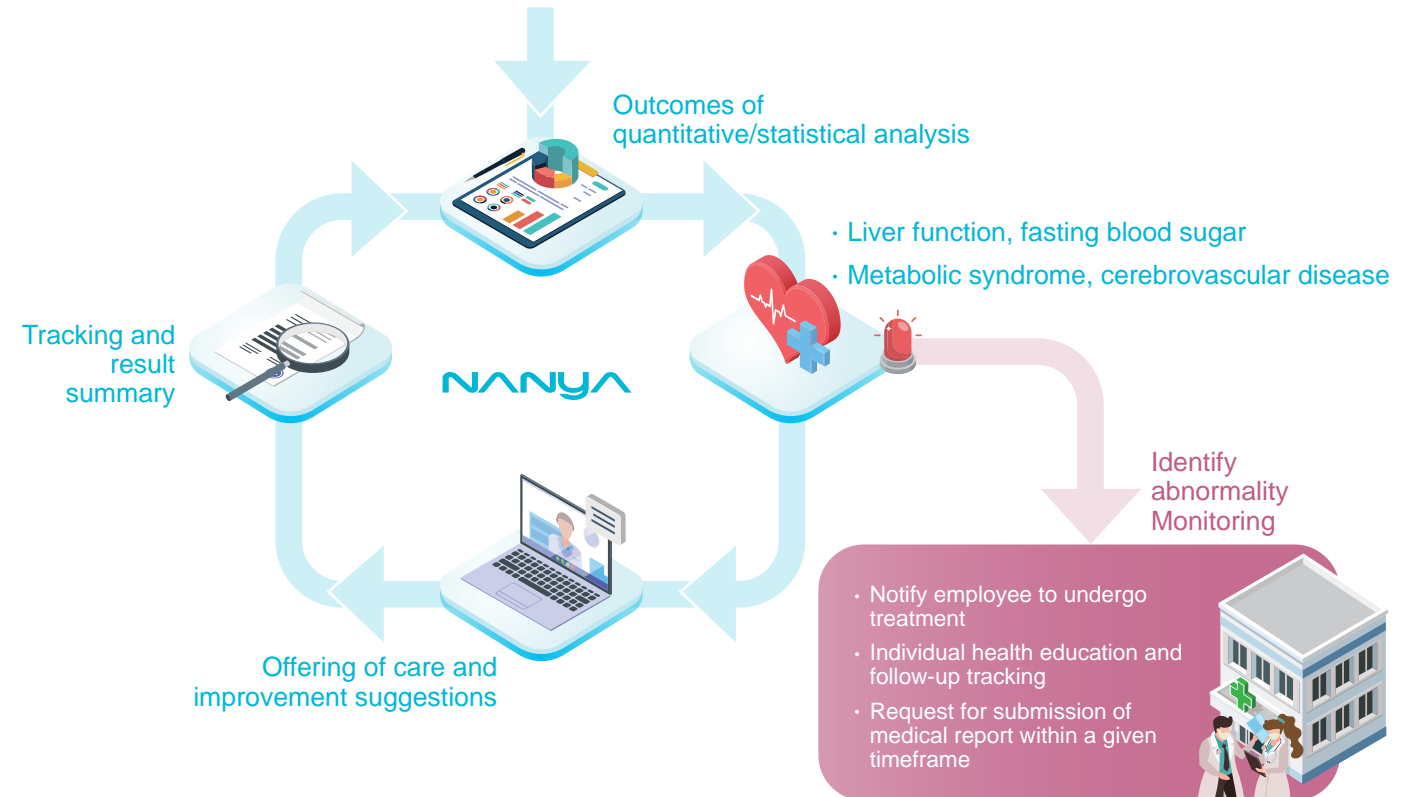
The Company offers regular employee health check services that are more favorable than what the laws require, and the health checkup also includes cancer screenings for α -Fetoprotein, carcinoembryonic antigen and oral cancer and waistline monitoring. Employees who exhibit abnormal health conditions (such as liver function, blood sugar, metabolic syndrome, cerebrovascular disease etc) are identified based on the health check results, and the Company provides them with healthcare information, suggestions and follow-up tracking.

	Abnormal blood pressure	Abnormal liver function	Abnormal blood sugar level	Metabolic syndrome	Low risk	Moderate risk	High risk	Total employees checked for the year
2021	8.16%	8.09%	1.68%	15.33%	83.45%	13.50%	3.05%	1,311
2020	8.13%	6.42%	1.57%	17.10%	89.45%	8.06%	2.49%	1,526
2019	3.87%	4.58%	1.76%	11.48%	86.90%	10.62%	2.48%	1,420
2018	8.55%	7.08%	1.18%	16.91%	90.26%	7.77%	1.97%	1,017
Total								5,274

Health promotion



Note: Risk levels are determined by using health check data (age, cholesterol, high-density cholesterol, blood pressure, diabetes, smoking history) to estimate the risk of developing ischemic heart disease within ten years.



In addition to arranging health check for employees, the Company also has a Health Center available to provide services such as preliminary treatment of injuries, preventive healthcare, weight management, and smoking cessation consultation. As a member of the Formosa Plastics Group, the Company is supported by the medical resources of Chang Gung Memorial Hospitals, including medical center-grade treatment and healthcare services. Employees of the Company and dependents are subsidized when seeking treatment at Chang Gung Memorial Hospitals, and are entitled to discounts on health checkups and various deductibles not covered by National Health Insurance Scheme.

The Company started holding charitable weight loss competitions in 2019. Employees are encouraged to sign up individually or as a team of 5 people. For every 1,000 grams of weight lost by employees, the Company donates NT\$1,000 to charitable organizations. The competitions not only help employees with weight control, but also serve as a measure to donate funds to those in need. In 2021, a total of 380 employees participated, and their weight loss totaled 939 kg.

► Response to epidemic disease

The Company has assembled an Epidemic Response Team based on recommended practices for SARS and avian influenza to facilitate quick response in the outbreak of epidemic disease, such as influenza virus. Response measures are being devised and conveyed to employees on an ongoing basis. At the end of 2019, when sporadic COVID-19 cases emerged, the Company immediately put the Epidemic Response Team into action, conducting work allocation and drills for various tasks. For example, when any infection cases occur, investigations based on the activity histories of the infected people issued by the Central Epidemic Command Center are immediately initiated, then results are reported back to the Company's Epidemic Response Team in order to promptly set up lists of those going on quarantine leaves or self-health monitoring periods. If necessary, further disinfection and cleaning for the surrounding environment is carried out.

The Company's epidemic prevention and response work focuses on the following ten areas: epidemic prevention and control measures, preparation of epidemic-prevention supplies, tracking of atypical cases, personnel health assistance, attendance management, control measures for guests and manufacturer personnel, subsidiary management, compliance with laws and regulations, business operation, and supply chain. With a cautious and prepared attitude, we hope to take preemptive and preventive actions. We have been making every effort to reduce the risks of infection in all of the Company's operations with a diligent attitude and preparedness.



Epidemic prevention propaganda

Influenza virus response measures are announced internally

Large posters are placed throughout plant premise to convey the importance of epidemic prevention and test employee understanding.

Distribution of health self-management notice and rules.



Epidemic prevention measures

- Reporting, containment and epidemic prevention leave.
- Restricting business travels and business errands, as well as number of people in meeting rooms.
- Epidemic prevention for contractors and visitors



Flu vaccination event - Held twice in 2021 (one at public expense and one at own expense), total number of participants: 393 people



LOHAS quit smoking event



Nanya held 2 blood donations in 2021. The event received a total of 264 blood donation visits, and 417 bags of blood were donated.



The Company cooperated with the Public Health Center in providing female employees with Pap tests and lessened their inconvenience of arranging transportations for such tests.



"Decrypt health - Understanding diets" seminar



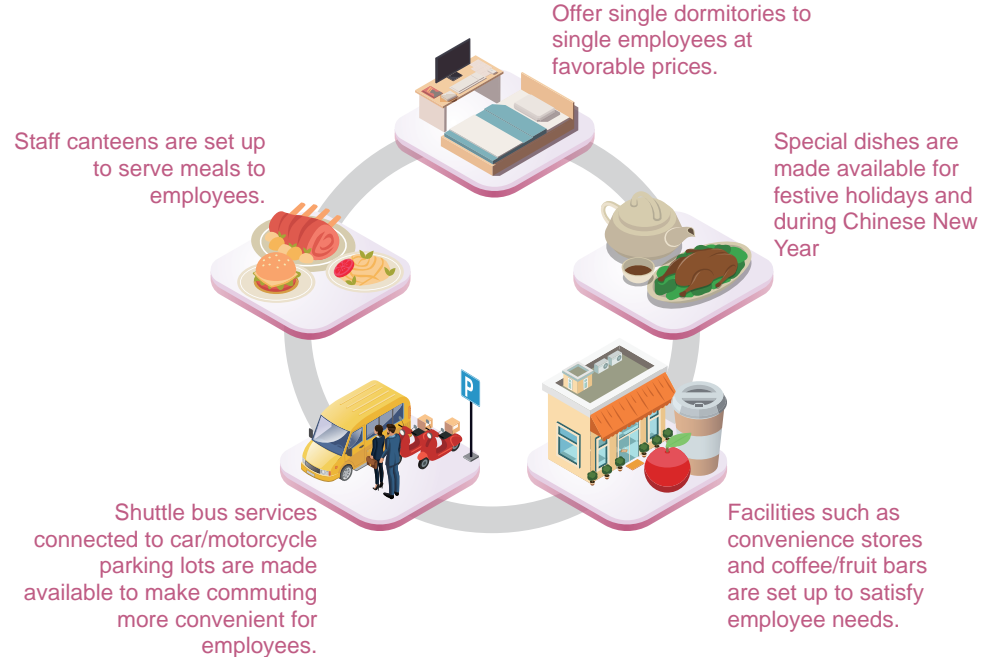
Dynamic yoga course

Assistance



The Company offers a wide range of benefits from dining, accommodation, shuttle bus to parking to improve the friendliness and convenience of the work environment for employees.

The Company also has an Employee Welfare Committee available to arrange diverse benefits and activities for employees. The Employee Welfare Committee comprises 9 members, 1 of whom is appointed by the Company whereas the other 8 are elected by employees from different departments. The Employee Welfare Committee received approximately NT\$55 million in funding in 2021; the majority of which was spent on incentive trips, festive gifts, birthday vouchers, children's scholarship, group insurance, entertainment, and childbirth and hospitalization subsidies. Due to the impact of COVID-19 and to follow government epidemic-prevention policies in 2021, many routine benefit activities arranged by the Employee Welfare Committee—including BBQ outings, movie carnivals, and end-of-year parties—were canceled. When the pandemic subsided in November, we distributed amusement park admission tickets for "Family Day" to raise morale and show appreciation for employees' hard work during the outbreak. The event encourages employees to plan family trips during the holidays.



Staff trips decreased significantly due to the pandemic, but after the pandemic slowed down, employees still took the opportunity to form a few tour groups.



Coffee/fruit bar



Clean single dormitory



Convenience store

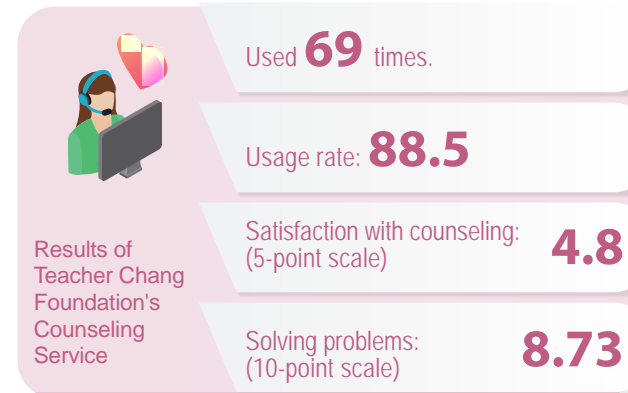
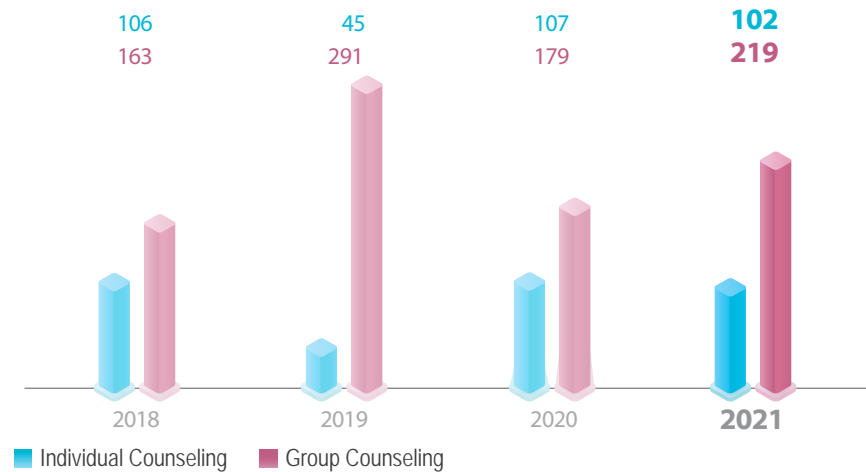


Kindness



In order to help new recruits adapt to the new workplace as quickly as possible, a counselor is made available to offer regular assistance, counseling, and guidance services to new employees who have joined the Company for less than two years, those who have taken the initiative to ask for help, referrals from supervisors, and employees who have taken long sick leaves. The goal is to reduce employees' feeling of insecurity caused by being in a new environment, and help them integrate into the Company as quickly as possible. In addition, an external professional psychological counseling organization, Teacher Chang Foundation, was introduced to the Company in 2019. Using scientific methods, employees who are facing difficulties are helped to "clarify the nature of the problem", "face difficulties", and then "find solutions". The service is available to employees 6 times a month free of cost; each session is one hour-long; and employees may utilize it for unlimited number of times. By using systematic methods to prevent and help with employees' problems, we stabilize employees' work quality as well as physical and mental well-being.

Number of times a new recruit received counseling service for adapting to new workplace:



Friendly environment for childbirth and raising children

For the convenience of female employees, the Company offers priority parking lots for pregnant employees and has nursery rooms in place to support gender equality in the workplace. The Health Center also conducts maternal health hazard evaluations for pregnant and breastfeeding women.

Nanya complies with the Occupational Safety and Health Act, and as an employer, it undertakes hazard evaluation, control and classification measures for work activities that are hazardous to maternal health. For female workers who are pregnant or have given birth less than a year ago, the Company adopts health protection measures and adjusts work details as recommended by physicians, and keeps relevant details on record. The Company disseminates health-related information and organizes women's health seminars on a regular basis. There are professional nurses stationed at plant sites to offer counsel on infant care for pregnant women. Nursery rooms fully equipped with lockers, refrigerators and water heaters have been deployed at all plant sites for the peace and comfort of all breastfeeding employees. Allowed to be used outside of rest time, breastfeeding time is considered work time, and employees' salaries will not be deducted for breastfeeding.

Nanya also has an unpaid parental leave system. Employees may apply for parental leave at their own will. This contributes to the stability of families and society by enabling employees to maintain a balance between work and family without worrying about child care issues. In 2021, a total of 345 employees (101 female and 244 male) were entitled to take unpaid parental leave, and a total of 24 people (19 female and 5 male) had actually applied.

Furthermore, Nanya has signed contracts with numerous kindergartens to provide employee discounts on registration fees, monthly fees, transportation expenses, and free extended hours, lifting the burden of childcare on employees.

Application for unpaid parental leave and reinstatement rate in Taiwan Note 1-3

2019			2020			2021		
Female	Male	Total	Female	Male	Total	Female	Male	Total
No. of employees entitled to unpaid parental leave								
112	244	356	112	252	364	101	244	345
No. of employees applied for unpaid parental leave								
19	4	23	19	4	23	19	5	24
No. of people due for reinstatement in the current year (A)								
10	2	12	7	3	10	10	5	15
No. of people applied for reinstatement in the current year (B)								
5	1	6	6	2	8	7	3	10
No. of employees still on the job 12 months after reinstatement								
9	1	10	5	0	5	5	2	7
Reinstatement rate % (B/A)								
50.00%	50.00%	50.00%	85.71%	66.67%	80.00%	70.00%	60.00%	66.67%
Retention rate %								
90.00%	100.00%	90.91%	100.00%	0.00%	83.33%	83.33%	100.00%	87.50%

Note1: "No. of people due for reinstatement in the current year": does not include employees who applied to extend their unpaid leave during the year.

Note2: "No. of people applied for reinstatement in the current year": includes employees who applied for reinstatement in the current year before the end of their leave.

Note3: "Retention rate" refers to the percentage of employees reinstated from unpaid parental leave who continued to work for one year and above.



Priority Parking Lots for Pregnant Employees



Nursery Room

Exercise



The Company organizes sport and entertainment activities from time to time to advocate work-life balance. By encouraging the creation of sport clubs and exercise space, we aim to promote sport habit and employees' physical as well as mental health.

Full-fledged sports/fitness center:



74,895 participants

Number of visits to the sports and recreation center in 2021

The multi-purpose sports and recreation center includes air track, basketball court, badminton court, KTV, pool table, table tennis, aerobics room, massage chair, and fitness equipment.

Encouragement of sport activities:

To help employees maintain sound physical and mental health, Nanya holds various events to promote the value of exercising. Fundings are also provided to sports clubs such as the jogging club, basketball club, table tennis club, badminton club, and slow pitch club. In 2019, a series of "Sports Festival" activities were launched. Through the combination of creative proposals from various departments and clubs, as well as the sports venues and facilities, we successfully promoted sports, creative thinking, and vitalized the Company's organizational atmosphere. Nanya's multiple initiatives to promote exercising led to the Company being awarded the "2019 Exercise Enterprise Certification Award" issued by the Sports Administration, MOE. The Company also won the "2020 Outstanding Healthy and Active Workplace Award" issued by the Health Promotion Administration, MOHW, which shows the improvements in the Company's sports ambiance and the external recognition it receives.



The 2021 Sports Festival Event consisted of 8 departmental teams, with more than 700 participants.



The fully-equipped recreation center is the best place to head to after work for employees who are sports enthusiasts.

Diverse club activities

The Company has a total of 24 clubs with diverse themes, including parenting, jogging, basketball, table tennis, badminton, slow pitch and hiking. More than 1,065 employees participated in the above club activities in 2021. The Company also encourages the clubs to hold annual recruitment events to increase staff participation and work-life balance.



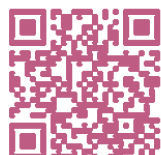
The slow pitch club competes with other companies in a tournament every year



The bicycle club took on the challenge of riding 210 km through the East Rift Valley

Employee Human Rights Protection

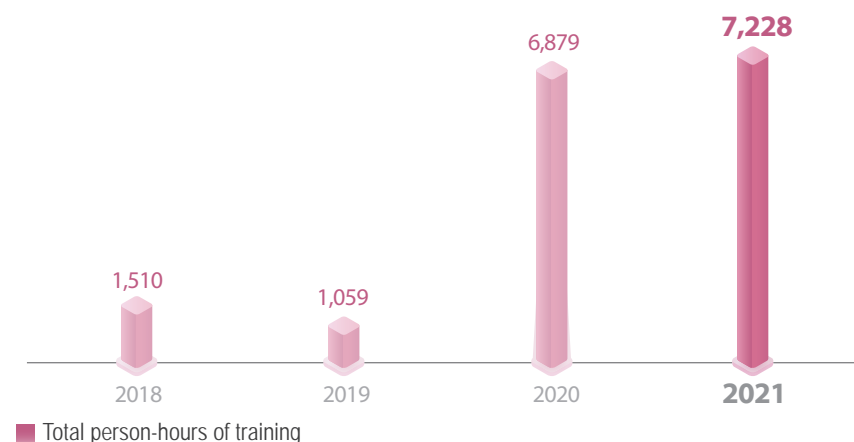
Nanya places great emphasis on employees rights and has established "[Labor and Ethics Policy](#)". The Company complies with relevant international human rights standards, including the behavioral guidelines of Responsible Business Alliance (RBA), Social Accountability 8000 Standard (SA8000), International Labour Organization (ILO), The Universal Declaration of Human Rights, The UN Guiding Principles on Business and Human Rights, General Data Protection Regulation (GDPR) and local government regulations. By implementing human rights risk assessment and management, the Company hopes to create an inclusive and diversity-friendly workplace.



Nanya Human Rights Policy

The Company commits not to hire child labor younger than 16 years of age and has never hired child labor. For the protection of employer's and employees' rights, all employees are given an employment notice prior to the work commencement date. The Company signs employment commitment in writing with all new recruits on the work commencement date, and 100% of employees have signed the commitment, meaning that all employees of the Company are fully protected by the terms of the employment contract. All employees have been hired with employment terms established under the free will, consent and consensus of both parties; no employee was forced or coerced to perform work activities unwillingly. In addition, there were no anti-discrimination incidents in 2021. "2021 Policy and Code of Conduct Training" and "2021 Unsafe Workplace Behavior and Prevention Training" are some of the training courses related to human rights policies and procedures in 2021, and the trainings mentioned are compulsory for all employees. The percentage of employees who have received the trainings is 100%, and the total person-hours of training is 7,228 hours.

Statistics on human rights policies and procedures training hours from 2018 to 2021



Note: Human rights policies and procedures training include the Company's labor and ethical regulations, the RBA Code of Conduct, unsafe workplace behavior and prevention, and the training mentioned is arranged for all employees. The scope of training and teaching methods was redefined in 2020, and the total number of training hours increased due to the increase in employees.

Human Rights Risk Management

Nanya assesses human rights risks using RBA and workplace health principles. The Company has an internal audit system in place to regularly assess employees' risk exposure and devise mitigation measures accordingly. We constantly identify human rights issues, susceptible parties and departments, and perform human rights risk assessments on a regular basis. Risk values are calculated to reflect the percentage of people at risk relative to total employees; based on the assessment results, the Company is able to devise annual improvements and set mitigation targets for human rights risks in the future.

The risk probability was 2.1% in 2021, 1.5% lower compared to 2020. However, overtime work is still a medium-risk issue with a risk probability of 1.8% and has exposure risk. Last year we also launched mitigation and remedial measures in response to human rights risk factors, and risk probability was lowered by 1.6% compared to 2020.

Human rights risks of Nanya

Human rights issues	Parties susceptible to influence	Assessment tools	2020 risk	2020 Probability of risk	2021 risk	2021 Probability of risk
Occupational injury	Production/new recruit/ Third-party contracted labor	Occupational injury report	Low	3.6%	Low	2.1%
Overtime	Production engineer/technician/R&D personnel	Attendance system	Medium		Medium	
Employment dispute	All employees	Government correspondence on employment disputes	Low		Low	
Workplace violence	All employees	Grievance investigation	Low		Low	
Child labor	Employees aged 18 and below	Identity proof	Low		Low	
Forced labor	All employees	RBA internal audit	Low		Low	
Protection of Personal Data	All employees	Cases of violation on personal data protection	Low		Low	
Maternity protection	Females in pregnancy or within 1 year of labor	Pregnant women or women who have given birth within less than a year are included in the tracking list if the work environment has caused harm to the mother or fetus.	Low		Low	
Protection of occupational health	People with blood pressure >140/90mmHg or metabolic syndrome	Health figures that did not become under control after assistance, health education, and medical treatments.	Low		Low	
Abnormal workload	Overtime working exceeding 37 hours a month for 6 consecutive months	Physical and mental health test scale	Low		Low	
Ergonomic engineering	The musculoskeletal soreness indicator was greater than 4 in the musculoskeletal symptom survey, and reflects on all employees often taking leave due to poor ergonomic design or soreness and discomfort	Tests for musculoskeletal injury and disease	Low		Low	
Human trafficking	All employees/ Migrant workers	Grievance investigation	Low	The risk probability of newly added assessment items in 2020 was all low.	Low	The risk probability of the five human rights risk assessment items was all low.
Equal pay	All employees	Grievance investigation	Low		Low	
Non-discrimination	All employees/ Migrant workers / Indigenous people	Grievance investigation	Low		Low	
Freedom of association	All employees	Grievance investigation	Low		Low	
Collective bargaining agreements	All employees	Grievance investigation	Low		Low	



Overtime

2021 risk: Medium

Mitigation measures: Attendance system prompt and control

Remedial measures: Provide overtime pay and rest time in accordance with the law, conduct abnormal workload assessments and provide counseling, assign tasks in a reasonable and fair manner, implement educational trainings to improve work efficiency, increase manpower in accordance with organizational needs.



Occupational injury

2021 risk: Low

Mitigation measures: Regularly conduct risk identification, perform preventive educational trainings for drivers, eliminate workplace hazardous factors and increase protective equipment.

Remedial measures: Provide emergency medical and first aid treatment, complete medical assistance; allow leave of absence and provide compensation in accordance with the law.



Employment dispute

2021 risk: Low

Mitigation measures: Have reasonable and clear company policies, multiple employee complaint and communication channels; proactively collect information on labor laws and modify relevant management policies in a timely manner.

Remedial measures: Establishing and fulfilling the rights and obligations of workers and management.



Workplace violence

2021 risk: Low

Mitigation measures: Have a complete internal mechanism for handling sexual harassment complaints, conduct sexual harassment prevention trainings, have a complete internal mechanism for handling workplace bullying, conduct workplace bullying prevention trainings.

Remedial measures: Immediately make effective corrections and implement remedial measures; assist in arranging counseling when necessary; make referrals to professional counseling services or medical institutions; adopt appropriate corrective, disciplinary, and issue-solving measures.



Child labor

2021 risk: Low

Mitigation measures: Explicit prohibition on the use of child labor in the manufacturing process; implementation of identity checking measures.

Remedial measures: Terminate child labor immediately, and the personnel is subject to the redundancy process; the parents and legal guardians of the child worker shall be notified; the Company covers the transportation/accommodation/other expenses involved in sending the child home.



Ergonomic engineering

2021 risk: Low

Mitigation measures: Implement prevention programs against disease caused by abnormal workload; identify and evaluate high-risk groups; conduct health inspections, management, and promotion.

Remedial measures: Arrange doctor interviews and health assistance.



Forced labor

2021 risk: Low

Mitigation measures: Explicit prohibition on the use forced labor in the manufacturing process.

Remedial measures: Terminate the personnel's work immediately, and the personnel is subject to the redundancy process.



Human trafficking

2021 risk: Low

Mitigation measures: Explicit prohibition on the use forced labor in the manufacturing process.

Remedial measures: Terminate the personnel's work immediately, and the personnel is subject to the redundancy process; notify police agencies and relevant authorities.



Protection of Personal Data

2021 risk: Low

Mitigation measures: Personal data risk register and assessment; formulate and execute improvement measures for items with high-risk ratings.

Remedial measures: Immediately notify affected persons and execute appropriate actions.



Equal pay

2021 risk: Low

Mitigation measures: Explicit prohibition on discriminatory practices in recruiting or hiring processes.

Remedial measures: Immediately make effective corrections and implement remedial measures. Re-examine the Company's methods and promote correct concepts in the management level.



Maternity protection

2021 risk: Low

Mitigation measures: Implement the health management plan of "Maternal Health Protection for Female Workers", conduct workplace hazard assessments, provide prenatal- and postpartum-related health education.

Remedial measures: Perform evaluations by on-site professional doctors and related teams; arrange doctor interviews and health assistance.



Non-discrimination

2021 risk: Low

Mitigation measures: Explicit prohibition on discriminatory practices in recruiting or hiring processes.

Remedial measures: Immediately make effective corrections and implement remedial measures; re-examine company policies and promote correct concepts in the management level.



Protection of occupational health

2021 risk: Low

Mitigation measures: Dietary education, health promotion events (quitting smoking, weight loss).

Remedial measures: Arrange doctor interviews and health assistance.



Freedom of association

2021 risk: Low

Mitigation measures: Conduct educational trainings for new recruits; promote correct concepts in the management level.

Remedial measures: Immediately make effective corrections and implement remedial measures; adopt appropriate corrective, disciplinary, and issue-solving measures.



Abnormal workload

2021 risk: Low

Mitigation measures: Conduct hazard assessments and make improvements; provide health-related counsel and recommendation.

Remedial measures: Arrange doctor interviews and health assistance.



Collective bargaining agreements

2021 risk: Low

Mitigation measures: Have clear and fair company policies, multiple employee complaint and communication channels; negotiate with the labor union before modifying labor conditions and work rules.level.

Remedial measures: Immediately respond to appeals and conduct good faith bargaining.

► Employee Protection and Communication

Zero Tolerance of Harassment and Discrimination

Nanya prepared a "[Prohibiting Workplace Violation Statement](#)", which was signed by the highest level manager to protect all employees from physical and mental illness due to physical or mental harassment and discrimination, showing the Company's commitment to having "zero tolerance" for workplace violence. Nanya will not tolerate workplace bullying by managers of any level, nor will it tolerate any unlawful workplace harassment against the Company's employees by coworkers, visitors, clients, or strangers. Nanya's employees have the responsibility to maintain and ensure that our working environment is free from unlawful workplace harassment. If a staff member witnesses or hears the occurrence of unlawful workplace harassment, he or she shall immediately call the employee complaint hotline (02-29045858#1132, #1133) or use the internal complaint email address (protection@ntc.com.tw) to report such event to the Human Resource Division, which is the dedicated management unit for complaints. The reported cases will be investigated confidentially by the Complaint Investigation Group, and resolutions of the cases will be made by the Complaint Review Committee. If the reported cases are found to be true after investigation, punishments shall be administered in accordance with the corporate management regulations. Moreover, if such facts involve criminal liability, the Company may report the event to judicial institutions for processing at the same time. The Company will handle punishments according to the approved punishment content, and will track, assess, and supervise the punishments to avoid the recurrence of unlawful workplace harassment. Moreover, the Company prohibits anyone from taking revenge on complainants, informants, or those helping with investigations. Those who do so will be punished in accordance with the corporate management regulations. Furthermore, the Company will keep a complainant's identity confidential. The Company will also assist and provide the complainant with compensation measures, including health guidance, work adjustment or change, and physical and psychological follow-ups.

Measures of Nanya for preventing harassment and discrimination

<h4>Zero tolerance</h4> <p>Nanya is committed to ensuring a workplace environment with zero violence. The Company will not tolerate workplace bullying by managers of any level, nor will it tolerate any unlawful workplace harassment against the Company's employees by coworkers, visitors, clients, or strangers.</p>	<h4>Penal Provisions</h4> <p>Reported cases are investigated confidentially by the Complaint Investigation Group, and resolutions of the cases will be made by the Complaint Review Committee. If the reported cases are found to be true after investigation, punishments shall be administered in accordance with the corporate management regulations. Moreover, if such facts involve criminal liability, the Company may report the event to judicial institutions for processing at the same time.</p>	<h4>Grievance channels</h4> <p>The Company's employees have the responsibility to maintain and ensure that our working environment is free from unlawful workplace harassment. If a staff member witnesses or hears the occurrence of unlawful workplace harassment, he or she shall immediately call the employee complaint hotline or use the internal complaint email address to report such event. Complaint hotline: 02-29045858 #1132, #1133 Complaint designated email: protection@ntc.com.tw</p>
<h4>Policy Statement</h4> <p>Nanya prepared a "Prohibiting Unlawful Violation in the Workplace Statement 1", to protect all employees from physical and mental illness due to physical or mental harassment in the process of performing their duties.</p>	<h4>Education and training</h4> <p>The Company arranges education and training on unlawful workplace harassment for employees at least once every two years, and organizes seminars and courses for managers as needed, in order to improve communication with employees and reduce their stress and frustration.</p>	<h4>Remedial measures</h4> <p>The Company will keep a complainant's identity confidential. The Company will also assist and provide the complainant with compensation measures, including health guidance, work adjustment or change, and physical and psychological follow-ups.</p>

Note 1: Definition of Unlawful Violation in the Workplace
Abuses, threats, harassment, discrimination, or attacks in work-related environments (including commuting) by staff members, which obviously or implicitly pose challenges to the staff members' safety, well-being, or health. Types of unlawful workplace harassment:

- (1) Non-sex- and non-gender-related behaviors
- (2) Physical (Physical assault, namely brutality and injuries that include: battery, scratches, punches, and kicks).
- (3) Psychological (Mental injuries, namely coercion and insults that include: threats, bullying, and serious abuse).
- (4) Verbal (Verbal abuse, namely inappropriate wording and intonation that include: bullying, intimidation, and interference).

- (5) Discrimination (Characteristics irrelevant to the execution of specific jobs are used to determine whether someone is hired or not or such conduct results in damage to working conditions).
- (6) Harassment (Repeated or persistent interference or disruptive behavior that is disturbing or threatening towards a specific person against his or her will).

Before the release of the guidelines on workplace violence, Nanya already had the "Workplace Sexual Harassment Prevention, Grievance and Disciplinary Policy" and "Nanya Employee Complaint Guidelines" in place; regarding the improper treatment of workers in the workplace, relevant preventive measures and follow-up investigations had been formulated. In 2019, these two sets of policies were integrated into the "Nanya Employee Protection and Complaint Measures", which provide types of unlawful workplace harassment and define the role and duties of different units in preventing and handling unlawful workplace harassment, making management more complete. In 2020, the Company started conducting employee protection measures, hazard prevention and identification, and risk assessments for each department. People with potential risks are listed as subjects of management as a measure to prevent and reduce risks in advance. Division, department, and section managers are also subject to policy education and asked to make declarative statements. Managers' self-check lists are also used to ensure the elimination of workplace violence. In August 2020, the complaint investigation mechanism was further strengthened and a complaint review standing committee was established. Upholding the principles of fairness and impartiality, appropriate punishment is imposed on the violators in valid complaint cases according to proportionality and severity of the situations. Courses on unlawful workplace harassment in 2021 were expanded from mid-level and senior managers to entry-level managers, and the courses were defined as required basic courses for management. In addition, the Company not only has counseling rooms, but also cooperate with the Teacher Chang Foundation to offer on-site counseling services. This provides space for employees to talk and receive counseling. Workplace mental health improvement seminars are also held regularly to provide workers with relief channels. Nanya had no unlawful workplace harassment and sexual harassment cases in 2021.

Unlawful workplace harassment training and statistics of cases

	2018	2019	2020	2021
Number of people trained in physical courses for management	-	478	227	197
"Occupational Hazards and Preventive Training" completion rate	-	100%	100%	100%

(II) Sex- and gender-related behaviors

- (1) Sexual harassment (Sexual behaviors towards a person against the person's will, including: inappropriate sexual innuendo remarks and behaviors).
- (2) Gender harassment (use gender discrimination or bias speech to insult, demean, or be hostile towards specific genders).

Grievance and Complaint Channels

The Company established the "Nanya Regulations for Employee Protection and Complaints", "Workplace Sexual Harassment Prevention, Grievance and Disciplinary Policy", and "[Nanya Reporting Procedure](#)" to provide employees with channels for reporting any unlawful or unethical conduct. When employees discover a breach of laws or inappropriate conduct that affects the interests of individuals or the Company or other related material issues or where an individual attempts to gain unlawful interest by abusing the power of their office, they may file reports at any time for responsible dedicated units to take charge of processing. Furthermore, the Company's official website has a whistleblowing hotline (02-29061001) and dedicated mailbox (audit@ntc.com.tw) for stakeholders to file complaints when their rights are damaged. A case officer is assigned or a team is assembled to investigate cases based on the contents, types, nature, and sensitivity of the case, as well as the level of the person being reported. For cases that involve a manager or director, the director that manages the audit department assembles a team to investigate the case. To protect the whistleblower, personnel responsible for processing cases shall conduct investigations based on the confidentiality principles and they shall be prohibited from disclosing cases to unrelated personnel. When investigating related individuals, the processing personnel shall only discuss parts that are relevant to the individuals to protect the identity of the whistleblower. Documents shall be processed and stored as confidential documents.

Number of reports through employee grievance and complaint channels over the years

	2018	2019	2020	2021
File written complaints (including anonymous reports)	1	0	2	5
Employee grievance report table	2	2	1	0
Complaint hotlines and mailboxes	1	0	0	1
Total	4	2	3	6

	2018			2019			2020			2021		
	Rejected	Accepted Case opened	Case not opened	Rejected	Accepted Case opened	Case not opened	Rejected	Accepted Case opened	Case not opened	Rejected	Accepted Case opened	Case not opened
Cases related to the Business and Ethical Code of Conduct												
• Corruption and bribery		0	0	0	0	0	0	0	0	0	0	0
• Improper income		0	0	0	0	0	0	0	0	0	0	2
• Fair competition		0	0	0	0	0	0	0	0	0	0	0
• Improper donations		0	0	0	0	0	0	0	0	0	0	0
• Protection of intellectual property rights		0	0	0	0	0	0	0	0	0	0	0
• Protection of personal privacy/data		0	0	0	0	0	0	0	0	0	0	0
• Sexual harassment		0	1	0	1	0	0	0	0	0	0	0
• Harassment		0	0	0	0	0	0	0	0	0	0	0
• Discrimination		0	0	0	0	0	0	0	0	0	0	0
• Environmental protection		0	0	0	0	0	0	0	0	0	0	0
• Occupational safety and health		0	0	0	0	0	0	0	0	0	0	0
Other		2	1	0	0	1	0	0	3	0	0	4
Total		2	2	0	1	1	0	0	3	0	0	6
		4			2			3			6	
Processing and case closed		4			2			3			6	
Case closure rate		100%			100%			100%			100%	



A total of 6 cases were reported in 2021, 2 cases were accepting gifts from vendors (improper income), 3 cases were private affairs, and 1 case was a complaint from a vendor of employees' attitude. The cases are described below.

1 After investigating gifts from vendors, there was no evidence to prove the reports, so the cases were not established. The employees involved were reminded to abide by regulations when interacting with vendors, and to strictly abide by regulations on business ethics.

2 Regarding the private affairs complaint, the persons involved dealt with it at their discretion.

3 Regarding the complaint from a vendor of employees' attitude, we found that the employees performed their duties according to regulations, and there is no clear evidence of any improper treatment. The supervisor reminded the employee to immediately report any difficulties with communication when performing duties.

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Occupational Health and Safety

Safe, Healthy, and High Quality Work Environment

The president of Nanya has signed a safety and health policy declaration, the Taiwan plant obtained ISO 45001 Management System certification, and the "NDAZ-0002 EHS Management Manual" was established to provide a safe, healthy, and excellent work environment to all workers at Nanya (the average of employees was 87% and other workers who are not employees was 13% in 2021). The Company is committed to ensuring that all workers of the Company have the ability to recognize hazards when conducting business activities so that occupational injuries can be prevented.

Nanya occupational accident prevention goals

Zero disabling injury



Nanya continues to dedicate its efforts to achieve zero disabling injuries in our factories. We have not let our guard down when it comes to disaster prevention, and we are constantly improving the safety concepts and behavior of workers. We have implemented the following measures to prevent occupational accidents:

- Annual regulatory and hazard identification and risk assessment procedures
- Annual occupational safety and health education and training plan
- Periodically organize safety culture seminars
- Job safety analysis (JSA) to analyze potential operational risks
- Safety Walk and Talk (SWAT)
- Process Safety Management (PSM)
- HazOp analysis to analyze potential equipment risks

Zero occupational disease



Nanya implemented the following measures to protect employees from occupational disease during special operations that are hazardous to health:

- Annual regulatory and hazard identification and risk assessment procedures
- Monitoring of work environment is performed twice a year
- Implement classified management of chemicals and exposure assessment
- Annual special hazard health exams (noise, ionizing radiation, arsenic, indium, n-Hexane, and mercury) and classified health management
- Health management plan (monitor and assess personnel working too many hours each month, repetitive musculoskeletal hazard prevention survey)
- Maternal health hazard assessment for pregnant women
- 5 or more health seminars are organized each year

In 2021, a total of 35 safety and health training courses were completed, and 9,962 enrollments were recorded. New recruits and senior employees/managers were trained for certifications required by the law and hazardous operations. An emergency response team (ERT) was established and motorcycle defensive driving courses were provided. We organized 48 emergency response drills to strengthen the training and response ability of personnel, including medium and high risks (such as chemical leakage and fire accidents), rescue of injured personnel, evacuation during an earthquake or fire accident, and actual operations of fire extinguisher. In addition to training, the Safety and Health Division conducted monthly on-site SWATs at the workplace of various teams based on 36 themes. The 35 suggestions for improving operational behavior safety were put forward for personnel to act accordingly to the contents of regulations. Improvements to the operational environment focus on safety and health improvements for medium and high risks in clean rooms.

Nanya 2021 Special Hazard Health Management

Ionizing radiation	Noise	Arsenic
Number of operators 144	Number of operators 100 ^{Note}	Number of operators 84
Indium	Inorganic mercury	n-Hexane
Number of operators 32	Number of operators 26	Number of operators 5

Note: Three employees implemented level 4 health management due to noise in 2021. After on-site assessment by an occupational medicine specialist and nurse, the management measure of reducing noise exposure was implemented.

Nanya's Proactive Safety and Health Improvement Plan for Clean Room Work Environment

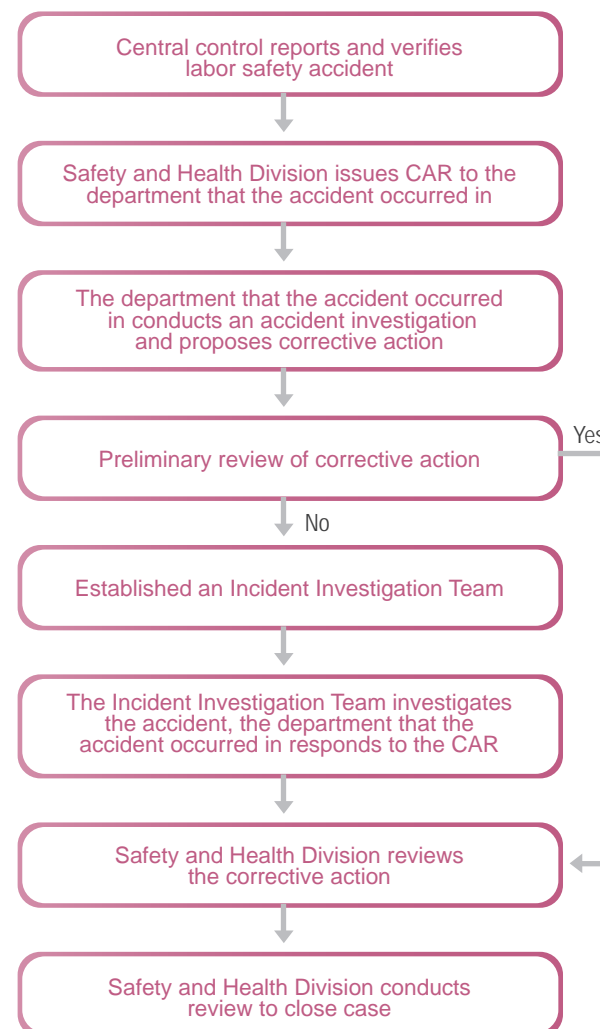
	2018	2019	2020	2021
No. of medium and high risks and improvement plans	12	17	12	9
Medium and high risk improvement rate	100%	100%	100%	100%
Amount invested in improvement plans (NT\$10,000)	158.4	396.4	383.7	341.8
Summary of Improvement Plan				
Fall protection for machine maintenance personnel working on platforms, liquid suction device for residuals in empty buckets, pipeline support enhancement and protection measures for pipeline modification, residual risk management.	Earthquake-proof construction for clean room machines and material shelves, lighting improvement for clean room areas, efficiency improvement for clean rooms' local air exhaust equipment, leakage prevention measures for pipeline valve and chemical storage areas.	Work safety for working aloft in clean rooms (adding lifelines), lighting improvement for clean room areas, adding protection nets for material shelves in clean rooms, fall protection for machine maintenance personnel working on platforms, rust and leakage prevention for pipeline valves.	Clean room machine cover, shaker improvement, and work platform personnel collision prevention, power connector insulation improvement, local air exhaust equipment improvement, pipe coating prevention, and valve leakage prevention measures.	

Statistical Analysis of Safety and Health Organization, Accident Investigation, and Disabling Injuries

Nanya places great importance on occupational safety and health. Occupational safety and health committee meetings are held every month at a regularity higher than what is required by the law. Each meeting is directed by the executive vice president, while the whole process is participated by senior managers, department heads, and committee members. Labor representatives make up 39.7% of the committee members. They jointly review the achievement statuses of various safety and health management goals, accident investigations, and the performance of safety and health projects. To strengthen communication on health and safety issues, in addition to existing channels of the Company (e.g. opinion box on the homepage), each department has appointed dedicated personnel to collect inquiries from employees, matters requiring participation, and proposals through department meetings, SWAT, and the Safety & Environment Event Tracking System (SETS). The personnel directly contact, receive information from, respond to, and consult the Safety and Health Division, establishing smooth channels for safety and health management and communication.

When an accident is verified by central control after investigation (occupational accident, false alarm, incident that affects physical and mental health), the Safety and Health Division will issue a Corrective Action Request (CAR) to the department that the accident occurred in to conduct a preliminary investigation and take corrective action. Whether or not an Incident Investigation Team is established to cooperate with the investigation is decided based on the severity of the accident. The Safety and Health Division strictly reviews corrective action taken for accident investigation. The department that the accident occurred in must conduct root cause analysis (RCA), including direct and indirect causes, and propose improvement and prevention measures to close the case.

Nanya accident investigation process



Note: Incident Investigation Team: 1. Head of the department of the incident 2. Personnel of the department of the incident 3. Work safety personnel 4. Other (Nurse, contractor, construction supervisor, or other personnel) 5. Labor representative.

There was a total of 26 false alarms in 2021. The main improvement to false alarms this year is liquid leak alarm (77%), which is mainly caused by personnel not taking machinery offline when performing abnormality improvements or maintenance and old connectors of chemical pipes. Improvement measures that were taken include reviewing the procedures for constructing chemical pipes and connectors, and making important valves a part of daily inspections and periodic replacements.

Disabling injury frequency rate (No. of disabling injuries/Million work hours) and severe disabling injuries rate (No. of lost work days/Million work hours) were both 0 in 2021. However, there was 1 case of contractor personnel injured in the machinery installation and construction process in 2021, in which personnel stepped into a hole in the elevated floor and bruised his right calf. After investigating the incident, Nanya provided the contractor with a load-bearing acrylic plate to cover the hole in the elevated floor, and conducted a job safety analysis to reassess the risk of operating procedures as an enhanced improvement measure.

2018		2019		2020		2021	
Employees	Other workers who are not employees	Employees	Other workers who are not employees	Employees	Other workers who are not employees	Employees	Other workers who are not employees
Total work hours (hours)							
5,974,816	330,592	6,398,888	345,824	6,778,840	404,054	6,872,456	339,387
Number of deaths resulting from occupational injuries (number of people)							
0	0	0	0	0	0	0	0
Number of recordable occupational injuries (no. of people)							
0	0	0	0	1	0	0	1
Occupational injury death rate							
0	0	0	0	0	0	0	0
Rate of recordable occupational injuries							
0	0	0	0	0.14	0	0	2.94
Number of occupational illnesses certified by physician							
0	0	0	0	0	0	0	0

Note 1: The occupational injury death rate and rate of recordable occupational injuries is calculated based on million work-hours.

Note 2: There were no serious occupational injuries (excluding number of deaths and those who lost more than six months of work days) in 2021.

Note 3: In 2021, the Company had no financial loss resulted from compensations or fines as outcomes of lawsuits involving employee occupational injuries or occupational illness.

Note 4: Other workers who are not employees refer to contractors.

Note 5: Number of recordable occupational injuries is consistent with the number of occupational accidents reported by the Company.

Safe contract work, division of labor based on specialization

Contractor safety has always been an important safety and health management item of Nanya. We have also treated the personnel of contractors as our own employees, and show respect and gratitude to contractors for using their professional abilities, equipment, and technologies to assist Nanya in completing various projects. Besides monitoring quality and progress, we prioritize providing an excellent environment and management for projects to be smoothly and safely carried out. We provide guidance to personnel of contractors to abide by regulations and engage in safe behavior, in order to achieve zero disasters and zero accidents.

In order to further strengthen and optimize safety measures, Nanya established a grading system for all contractors that undertake construction works outsourced from the Company. The system exists not only to control contractors' quality and occupational safety and health standards, but also to protect their employees from occupational injury. We collect data on professional contractors for each type of project, evaluate their construction site, machinery, and equipment, their construction site safety management ability, technical ability, and past performance, and then divide contractors into Grade A/B/C based on their ability and performance. Contractors that are not assigned a grade can apply for an upgrade review. We also periodically convene contractor forums and provide a contractor platform, providing guidance for contractors to be upgraded according to their category, construction safety personnel, professional technicians, main technicians, sub-contractors, construction machinery, and performance. Safety and health management expenses are listed as a required item during budgeting, and safety and health facilities must be listed in detail and included in the construction specifications in the contract. Nanya manages contractors according to regulations and standards of Formosa Plastics Group, and also prepared an application form for controlled constructions, application form for hot work, application form for lifting and suspension cage operation, and high risk construction worker checklist. We also control and inform contractors of the work environment, hazards, and safety and health regulations to maintain construction safety.

The Company currently has a number of safety and health management mechanisms to maintain a safe work environment for workers, such as self-inspection conducted by each unit, inspection and proposals by personnel of the safety and health department, SWAT, and accident report investigations. The mechanisms are also applicable to contractors. Employees are encouraged to monitor contractors for unsafe conducts, and may report abnormalities to Central Control through the their team leader or safety and health personnel via safety and health management mechanisms for immediate tracking and improvement.

All personnel of contractors must take the contractor pre-entry safety and health training course before entering our factory. The purpose of the course is to inform them of work environment hazards, regulations that require compliance, and raise their safety awareness. Employees that serve as safety supervisors are required to complete the safety supervisor course required by internal regulations. This is to ensure that they are clear about the duties of a safety supervisor, in order to prevent an occupational accident from occurring.

Pre-entry Safety and Health Training for Contractors and Training Completion Rate

