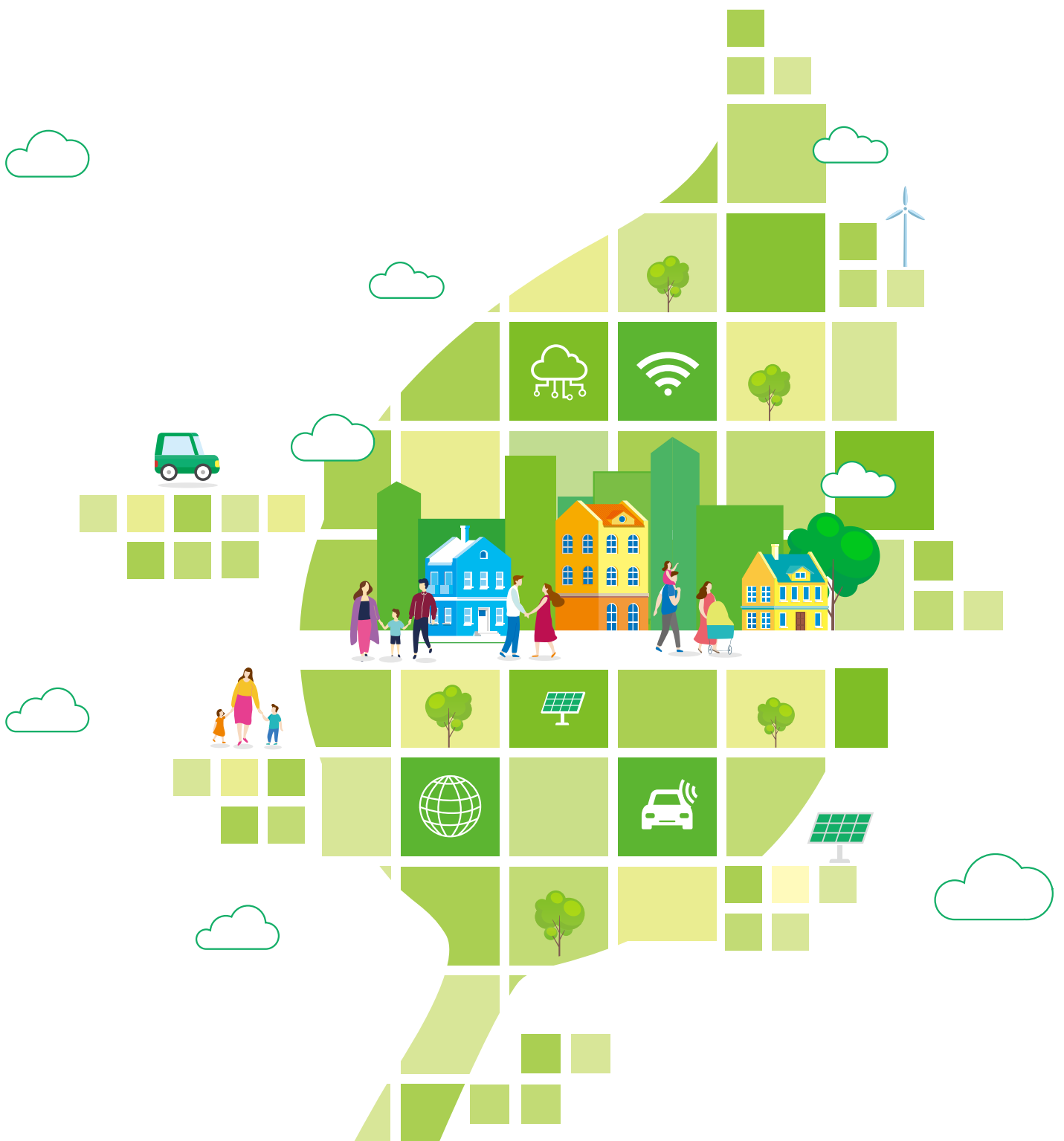


2018 Nuvoton Technology Corporation

Corporate Social Responsibility Report



Joy of innovation



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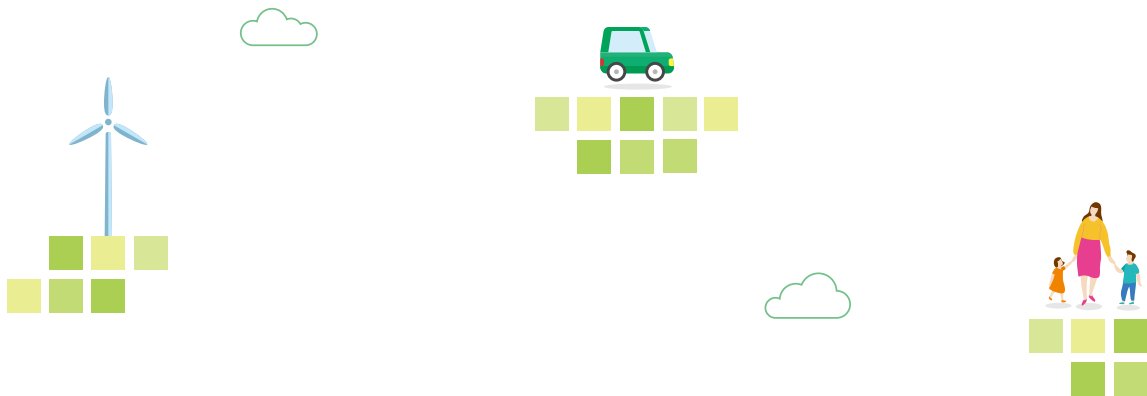
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Words from the Chairman

Looking at the global semiconductor industry in 2018, the industry trend is gradually moving towards the consumer application market. The demand for AI technology, 5G technology, automotive, industrial, and Internet of Things (IoT) applications has increased, and the innovation and progress of semiconductor technology provides the industry development with a positive outlook. In response to the market sentiment, Nuvoton Technology continues to introduce new products and services. The 2018 year has set a new record with its operating results, causally demonstrating the company's solid operational capabilities. Putting corporate sustainability into practice, Nuvoton is committed to treating all stakeholders with the principle of "fairness, impartiality, and justice". Upholding the corporate culture of "sustainable contribution", we also continue to deepen various policies for sustainable development in three major aspects: economic, environmental, and social. We strive to utilize corporate influence to continue towards our corporate social responsibility vision of "providing a sense of safety, reassurance, and empathy".

Corporate Governance

In terms of overall financial performance, Nuvoton's 2018 consolidated revenue amounted to NTD 10.04 billion, up 9% from 2017; net income after taxes amounted to NTD 711 million, up 3% from 2017. Earnings per share (EPS) amounted to NTD 3.42. We sustain the principle of "integrity management" in establishing a robust corporate governance framework, while also continuing to strengthen management functions. In addition, through a robust internal control mechanism, we supervise the internal company operations to ensure financial information transparency while instantly revealing important information to decrease the risks related to corporate management. In the fifth corporate governance evaluation in 2018, Nuvoton ranked in the top 5% in all publically traded companies, affirming our efforts in corporate governance.

Customer Service and Supplier Management

Nuvoton regards customers and suppliers as important partners and is committed to providing excellent quality to enhance the competitiveness of its customer products. We also implement a series of quality control mechanisms and customer satisfaction surveys to ensure the quality and reliability of our products. The 2018 customer satisfaction survey shows average satisfaction at above 4 points, and the indicators all scored higher than in 2017. For sustainable supply chain management, we aim to establish a robust and secure supply chain, and regularly conduct quality assessments and corporate social responsibility (CSR) performance assessments for key supplier partners. We put forward our best efforts to fulfill corporate social responsibility together with our suppliers.

Environment-Friendly

Complying with environmental laws, regulations, and international standards, Nuvoton is committed to continuous improvement as well as becoming a green enterprise with sustainable development. We strive to reduce the impact of production on the environment and eliminate any foreseeable environmental pollution risks through source reduction and company-wide participation to protect the natural environment. We are actively reducing the power consumption in our plant area. We added an advanced ice machine system and also implemented a total of seven major energy conservation measures, saving an estimated 1.61 million kWh in electricity consumption. In 2018, Nuvoton was awarded the "Saving Energy Commendation" from the Ministry of Economic Affairs, demonstrating our commitment to corporate social responsibility. We are also committed to protecting the natural environment. In 2018, the waste incineration amount decreased by 19 tons compared with 2017, and the incineration treatment rate decreased by 4%. In addition, our greenhouse gas emission intensity decreased by about 7% from 2017. As evident in our business operations and activities, we are committed to achieving a level of development that balances economic, social, and ecological factors.

Best Workplace

Employees are the cornerstone of corporate development, and Nuvoton places great importance on talent recruitment. With a comprehensive management system, competitive salary and benefits, as well as an excellent working environment, we attract new talent to join Nuvoton. Through diversified education and training, employees can continue to improve with the company with corporate sustainable development. In 2018, employees at Nuvoton received a total of 12,035 hours of training, with a total number of 9,296 attendees. In order to create a "work happily, live seriously" LOHAS workplace culture, we promote friendly workplace events, such as celebrity lectures, sports days, 10th anniversary happy family day, and company trips to enhance the physical and mental health and workplace happiness of our employees.

Philanthropy

In 2017, we have continued various public welfare projects, calling up our employees to participate in beach cleaning events for environment protection, as well as continuing to help the disadvantaged groups in society by organizing year-end donation events such as second-hand charity sales and used goods donations. The funds raised are mainly used to help the Genesis Social Welfare Foundation, Shih Guang Educational and Nursing Institution, Taiwan Fund for Children and Families, and the Children's Hearing Foundation, as well as Nuvoton employees of need.

Looking to the incoming future of emerging technology, such as artificial intelligence, big data, Internet of Things (IoT), and cloud computing, Nuvoton continues to improve its research and development energy while developing various product applications and services. We actively participate in the events of industrial unions and technology alliances to obtain the latest technology in the industry. We believe that we will be able to open up more business opportunities in the future and create long-term stable returns for shareholders, customers, and employees. We also aim to be the best indispensable partner to our customers. Combining our core capabilities and sustainable development strategies, we continuously improve our operational performance in the aspects of corporate governance, environmental protection, and social participation to honor our commitment to corporate sustainability.

Chairman

陳清銘



2018 Corporate Sustainability Performance Summary Sheet

Sustainable Aspect		2018 Performance
Economic	Economic Performance	<ul style="list-style-type: none"> Nuvoton's 2018 consolidated revenue amounted to NTD 10.04 billion, up 9% from 2017; net income after taxes amounted to NTD 711 million, up 3% from 2017. Earnings per share (EPS) amounted to NTD 3.42.
	Corporate Governance	<ul style="list-style-type: none"> In the fifth corporate governance evaluation, Nuvoton ranked in the top 5% in all publicly traded companies.
	Customer Satisfaction	<ul style="list-style-type: none"> High customer satisfaction: satisfaction survey shows average satisfaction at above 4 points.
	Supplier Management	<ul style="list-style-type: none"> In 2018, approximately 93.1% of our supply chain vendors have environmental related certification. Vendors which were unable to obtain certification in time were required to establish a verification schedule. Nuvoton's top 80% packaging and testing plants and raw material vendors (a total of 9 plants and vendors) have conducted corporate social responsibility self-evaluations in 2018. The self-evaluation results comply with the requirements of Nuvoton. As of 2018, all of Nuvoton's outsourced wafer processing manufacturers packaging plants, packaging plants, and raw material suppliers (WF6 gases) have signed the "Statement of Non-use of Conflict Minerals"
Environmental	Water Conservation	<ul style="list-style-type: none"> Implemented a total of seven major energy conservation measures, saving an estimated 1.61 million kWh in electricity consumption.
		<ul style="list-style-type: none"> Nitrogen consumption per unit of product has continued to decrease. It decreased by 61.1% compared to the base year 2009.
		<ul style="list-style-type: none"> Sulfuric acid consumption per unit of product has continued to decrease. It decreased by 37.2% compared to the base year 2009.
Environmental	Waste Management	<ul style="list-style-type: none"> The hydrofluoric acid waste liquid that was previously treated by the wastewater treatment plant will now be reused by a recycling manufacturer to promote the normal circulation of substances in the economy or ecology, increasing the recycling rate of waste. Promotes the source reduction of photoresist strippers in incineration. The amount of waste incineration reduced by 19 tons and the incineration rate decreased by 4% compared to 2017.
		Greenhouse Gas Reduction

Social	Labor Relations	<ul style="list-style-type: none"> • Labor disputes: 0. No discrimination or compulsory labor complaints occurred. • The retention rate of employees returning to work at the end of maternity leave in 2018 was 87%. The retention rate of employees returning to work at the end of maternity leave in the previous year was 100%
	Occupational Training	<ul style="list-style-type: none"> • Total employee training hours: 12,035; total attendees: 9,296.
		<ul style="list-style-type: none"> • All employees completed CSR courses, amounting to a total of 2,885 attendees with a passing rate of 98%
	Occupational Safety	<ul style="list-style-type: none"> • Employees that had completed safety and health education and training reached a total of 2,196 attendees, and the total number of qualified personnel in the emergency response team was 408, accounting for 28.7% of the total number of employees. • There were a total of 58 annual emergency drills conducted (including fire alarms, chemical leakage, gas leakage, earthquake, system anomalies, limited operations, emergency evacuations, etc.). • There have been zero contractor Incapacitating injuries within the past five years.
Public Welfare Events	<ul style="list-style-type: none"> • We called out employees to participate in the friendly environment charity event "Spring and Autumn Beach Cleaning" and sponsored donation events such as "second-hand charity sales and used goods donations". The total amount of donations in 2018 amounted to NTD 180,000. 	





01 Overview

- Description
- Communication and Participation of the Stakeholder
- Modes of Communications with the Stakeholders



Overview

Description

In 2014, Nuvoton voluntarily issued its first CSR report to practice corporate social responsibility. We started to regularly issue CSR reports in 2016, providing stakeholders with Nuvoton's efforts and performance in regard to the economy, environment, and society. At the same time, Nuvoton also publishes its report on the CSR area of the company website to establish a transparent and effective channel of communication for all stakeholders.

Scope

Covering the period from January 1, 2018, to December 31, 2018, this report explains the various aspects of Nuvoton's business and their performance in regard to fulfilling corporate social responsibility. The financial data of this report is drawn from information listed in consolidated financial statements, which are inclusive of Nuvoton's global subsidiaries (including the United States, Israel, China, Hong Kong, and India). Calculated in New Taiwan Dollars (NTD), the financial statements were audited and certified by Deloitte Taiwan. Because the main site of Nuvoton is located in its headquarters in Taiwan, other aspects in environmental and social issues, such as corporate governance and environmental protection, are specific to Nuvoton's headquarters in Taiwan.

Framework and Guidance

The framework and guidance of this report are based on an analysis of concerns held by Nuvoton's stakeholders, as well as issues considered to be significant during the period covered by this report. We have prepared this report in accordance with the latest GRI Standards released by the Global Reporting Initiative (GRI) to expose the performance results and management guidelines of the issues at hand. The appendix contains a comparison table of the framework for the reference of readers.

Release Notes

- 2018 CSR report: Scheduled to be released in November 2019
- 2019 CSR report: Scheduled to be released in November 2020

The previous report was issued in November 2018. To fulfill CSR in regards to environmental conservation,

an electronic copy of this report will be published on the company website. This report will be available in Traditional Chinese and English versions.

Warranty

This report has commissioned an independent third party impartial unit, "SGS Taiwan Ltd.", to verify that the content complies with GRI Standards Core Option and AA1000AS TYPE 1 Assurance Engagement. The third-party verification statement can be found in the appendix.

Give Feedback to the Report

We welcome your suggestions to the content of this report. You can contact us:

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- Telephone: +886-3-5792771
- Fax: +886-3-5792525
- Email: CSR@nuvoton.com
- Website: www.nuvoton.com

Communication and Participation of the Stakeholders

Nuvoton is focused on sustainable management issues as well as communication with stakeholders to understand the major issues of interest to stakeholders. This report serves as a response to relevant major issues so stakeholders are able to more fully understand the actions and efforts that Nuvoton put into corporate social responsibility.

Defining the Stakeholders

Taking into consideration foreign and domestic sustainable development and organizational operations, Nuvoton's Corporate Social Responsibility Committee defines the 8 main stakeholders of Nuvoton as the following: employees, customers, shareholders, directors and supervisors, suppliers, the government, community, and media.

Identified Material Aspects

The Corporate Social Responsibility Management Committee has referred to the Responsible Business Alliance (RBA) Code of Conduct and the Global

Reporting Initiative (GRI) on economic, environmental, social, and aspects before consolidating 33 topics of concern for stakeholders. The following describes the process for identifying the concerns of stakeholders:

• Collection

In accordance with the stakeholders as defined by the Corporate Social Responsibility Management Committee, as well as GRI standards, we consolidated the various topics of concern to stakeholders and divided them into three categories: economic, environmental, social, and product. We listed a total of 33 material aspects for stakeholders.

• Survey

Through the form of questionnaires, stakeholders filled out information regarding their level of concern towards sustainable issues, giving 1 to 5 points (from low to high) depending on their level of concern. A total of 105 questionnaires were

collected on the degree of concern for stakeholders. In addition, Nuvoton's internal Corporate Social Responsibility Management Committee conducted impact degree ratings, giving 1 to 5 points (from low to high) depending on the degree of impact. A total of 22 questionnaires were collected on the external degree of impact of business operations.

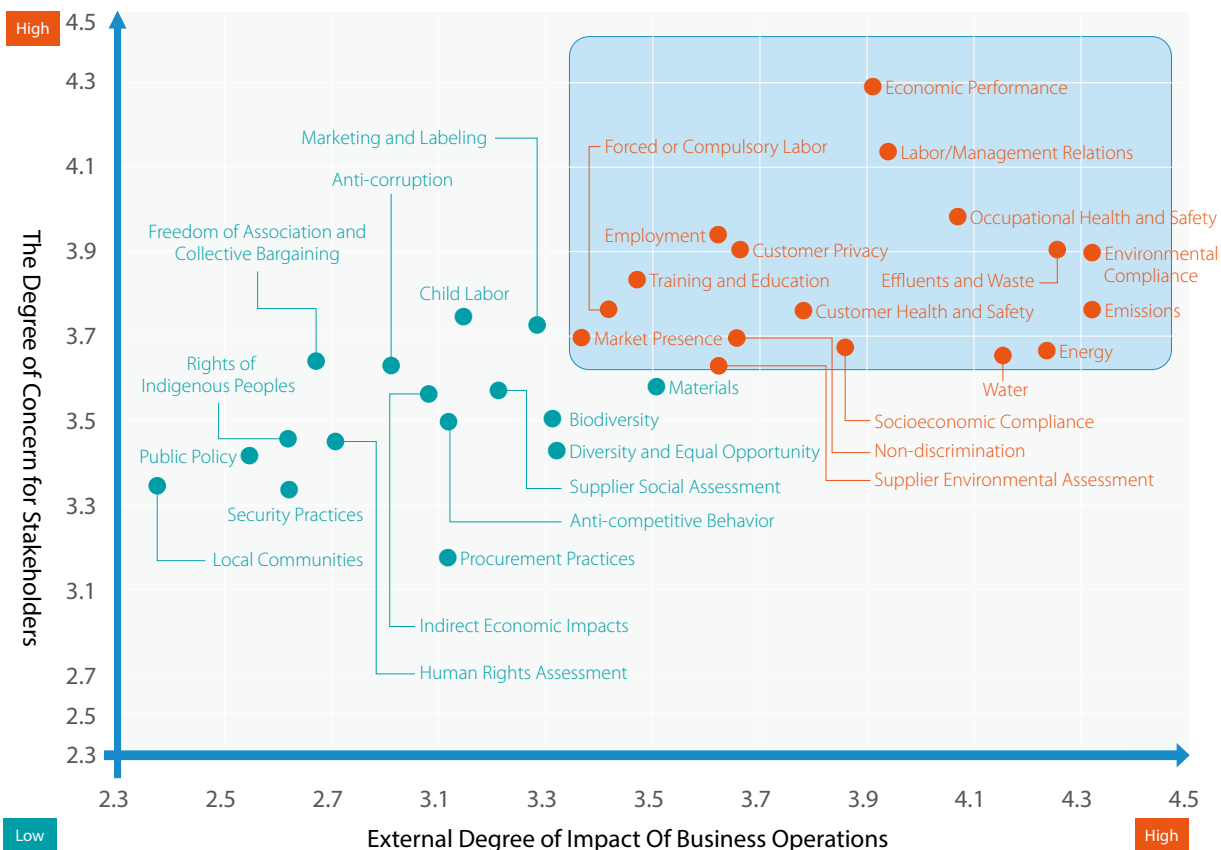
• Analysis

We analyzed the results of the selection (the degree of concern for stakeholders and the external degree of impact of business operations) before identifying and prioritizing topics of concern.

• Submission

After receiving approval from the Corporate Social Responsibility Management Committee, the results of the analysis laid the framework for this report. Furthermore, Nuvoton has responded to various significant issues and based its goals for further improvement on the results of this analysis. The substantive analysis results are as follows:

Substantive Analysis Results



Response to the Significant Topics of Concern

Based on the results of the material analysis, we have listed 17 significant topics of concern for stakeholders in the following table. This report discloses GRI standards in regards to material aspects, management policies, and related indicators to conduct comprehensive performance disclosure.

Response to the Significant Topics of Concern				
Element	Material Aspect	Nuvoton (IC design, wafer fabrication)	External	
			Packaging and Testing	Finished Product Output
Economic	Economic Performance	●		
	Market Image	●		
Environmental	Energy	●	●	
	Water	●	●	
	Emissions	●	●	
	Sewage and waste	●	●	●
	Environmental law compliance	●	●	●
	Environmental assessment of suppliers	●		●
Social	Employee-employment relationship	●	●	
	Labor/capital relationship	●	●	
	Occupational health and safety	●	●	
	Education and training	●		
	No discrimination	●	●	
	Forced and compulsory labor	●		
	Customer health and safety	●	●	●
	Customer privacy	●		
Social and economic compliance	●	●	●	

Modes of Communications with the Stakeholders

Nuvoton has collected significant topics of concerns for stakeholders, establishing a diverse and open communication channel so it can provide immediate responses to the expectations and recommendations of stakeholders. Nuvoton also has a corporate social responsibility email, csr@nuvoton.com, so internal and external stakeholders can put forward corporate social responsibility issues.

Modes of Communications with the Stakeholders			
Stakeholder	Topics of Concern	Communication Channel	Communication Frequency
Employees	<ul style="list-style-type: none"> • Employer-Employee Relationship • Labor/Capital Relationship • Occupational Health and Safety • Education and Training • Diversification and Equal Opportunity • No Discrimination 	Labor-Management Meetings	Quarterly
		Executives Management Sharing Meetings	Quarterly
		Executives Management Sharing Meetings	Quarterly
		Employee Welfare Committee	Quarterly
		Employee Suggestion Box	Irregularly
		Grievance Mailbox and Hotline	As needed
		Intranet	Irregularly
Employers	<ul style="list-style-type: none"> • Customer Privacy • Customer Health and Safety 	Customer Satisfaction Surveys	Annually
		Customer Survey or Site Audits	Irregularly
		Company Website - Members Zone	Irregularly
		Technical Seminars	Irregularly
		Phone and email	As needed
Shareholders	<ul style="list-style-type: none"> • Economic Performance • Market Status 	General Shareholders' Meetings	Annually
		Investor Conferences	Every six months
		Financial Annual Reports	Annually
		Company Website	Irregularly
Directors and Supervisors	<ul style="list-style-type: none"> • Product Liability • Legal Compliance • Economic Performance • Environment • Legal Compliance 	Board of Directors Meetings	Quarterly
Suppliers	<ul style="list-style-type: none"> • Procurement Practices • Product Liability • Legal Compliance • Environmental Assessment of Suppliers 	Supplier Evaluations	Every six months
		Supplier CSR Surveys	Annually
Government	<ul style="list-style-type: none"> • Legal Compliance • Environmental Law Compliance • Market Status 	Official Notices	Irregularly
		Legal Rules Conferences	As needed
		Communication with the Competent Authorities through the Allied Association for Science Park Industries	As needed
Communities	<ul style="list-style-type: none"> • Sewage and Waste Discharge 	Company Website	As needed
		Email	As needed
Media	<ul style="list-style-type: none"> • Market Status • Economic Performance 	Press Conferences/Irregular interviews	Irregularly
		Press Releases	Irregularly
		Company Website	Irregularly

INFOGRAPHICS



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02 Company Overview

- About Nuvoton
- Company Vision
- Innovative Technology and Products
- Responsibility to Our Investors
- Financial Performance
- Association (Guild) Membership
- Glory and Affirmation



Company Overview



About Nuvoton	
Company Name	Nuvoton Technology Corporation
Founded	2008
Capital	NTD 2,075,554,000
Main products and technologies	Our operational focus lies in the design and sales of integrated circuits, as well as the foundry industry
Number of Employees	1,408
Headquarters Address	No. 4, Creation 3rd Road, East District, Hsinchu City, Taiwan

About Nuvoton

In 2008, Nuvoton was founded to provide innovative solutions for the semiconductor industry. In July of that year, it was spun-off from Winbond Electronics Corporation Logic IC business unit and officially launched its own operations. In 2010, Nuvoton became publicly listed on the Taiwan Stock Exchange. With a focus on the development of analog/mixed signal, microcontroller, and cloud computing-related IC products, the company holds a leading position in the industrial electronics, consumer electronics, and computer markets. Furthermore, Nuvoton owns a semiconductor foundry that provides customized processes for analog, power, and microcontroller products. Apart from its in-house IC products, Nuvoton also offers a part of its capacity for foundry services.

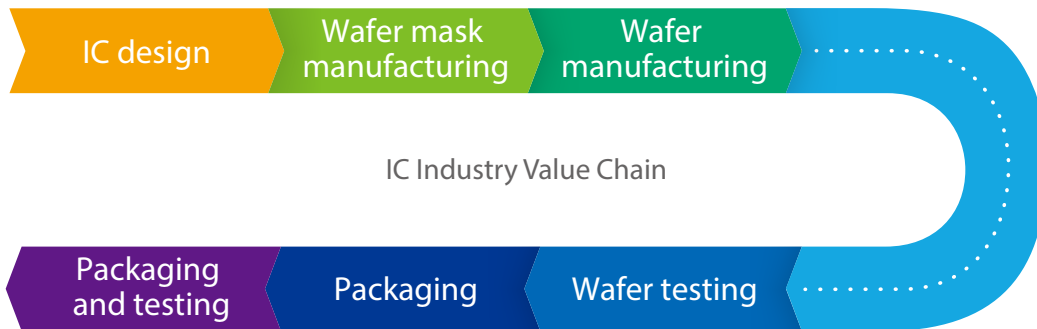
Nuvoton provides products with high performance/cost ratio for its customers by leveraging flexible technologies, advanced design capabilities, and the integration of digital/analog technologies. Nuvoton values long-term collaborative relationships with its customers and partners, and strives for continuous innovation and improvement in its products, processes, and customer services. Based in Hsinchu, Nuvoton also has subsidiaries in the U.S.A., China, Israel, and India to strengthen regional customer support and facilitate global operations management. For more information on global locations, please refer to the official website of Nuvoton Technology. (http://www.nuvoton.com/hq/?__locale=zh_TW)

Company Vision - Joy of Innovation

Due to the development of semiconductor technology, the breakthrough in transmission bandwidth and the popularity of information sharing has caused cloud computing to become the developmental focus of digital life. With worsening global warming, limited natural resources, and the pressure to maintain an ecological balance, green technology has become the key to sustaining human civilization. We can experience infinite possibilities in the aforementioned development space.

With courageous, like-minded partners that love learning, our organization is a passionate and creative team, constructing a competitive advantage with innovation as its core. Nuvoton is committed to creating a happy work environment where employees can have the freedom to imagine and invent, as well as achieve their ideals or learn from failure. The purpose of innovation is to create user value. The manifestation of value is not confined to a single form or source. We set out to create innovation with our customers and partners, driving the development of our industry, while giving back to our employees, shareholders, and community so we can share the joy of innovation.

Innovative Technology and Products



In the IC industry value chain, Nuvoton's operational focus lies in the design and sales of integrated circuits (IC), as well as the foundry industry. Backend raw material procurement, outsourced manufacturing, and packaging testing are carried out by the suppliers. General purpose IC remains the principal item of Nuvoton's integrated circuits, but the scope of application is extensive, including microcontrollers (MCUs), audio products, and cloud computing products. In addition, the company also owns a 6" wafer fab with monthly production capacity for 45,000 pieces featured with a diversity of process capacity for foundry service. Nuvoton's main products and services are as follows:

- **General Purpose IC**

Nuvoton's general purpose IC products include microcontrollers (MCUs), audio products, and cloud computing products.

Nuvoton's microcontrollers utilize a complete product platform, including the 8-bit product line and 32-bit product line. With ultra-low power consumption, high precision, high anti-interference, rich peripheral resources, and high security and confidentiality requirements, it satisfies the market needs of the Internet of Things (IoT), health care electronic products, industrial control, consumer electronics, and communication products.

Audio products include Audio CODEC, Arm® Cortex®-M0/M4, Audio MCU with 4/8-bit MCU as

the core, and Class D Speaker Amplifiers. The target market includes diversified applications such as smart toys, smart robots, smart audio, consumer electronics, as well as automotive and industrial markets.

For cloud computing products, Nuvoton utilizes a top-down approach in the industrial ecosystem, from cross-border data centers, supercomputer servers, edge computing to computer-related smart devices. Focusing on the integrated field specialty, Nuvoton jointly develops innovative features with long-term clients which includes communication interfaces, security framework, and energy management, providing brand manufacturers and outsourced manufacturers with specialized server-use baseboard management controllers, power management controllers, trust platform modules, Super I/O, and embedded controllers.

- **Semiconductor Foundry**

Nuvoton owns an advanced 6" semiconductor foundry. With more than 25 years of experience in wafer fabrication, the foundry upholds the spirit of innovation and transcendence, continuing to provide a long-term and stable production capacity, excellent product quality, and timely deliveries. With a strong R&D team and semiconductor supply chain resource integration services, we utilize the innovative thinking of "More-Than-Foundry" to create added value for customers, becoming an indispensable partner for our clients in this competitive market.

Technologies and Products Developed in 2018

Year	Results
2018	Launched the NuMicro® M2351 series of microcontrollers focused on IoT security with built-in TrustZone® technology.
	Launched the NuMicro® M480 series Arm Cortex®-M4 microcontroller with high efficiency and safe boot mechanism and hardware encryption.
	The BMC server remote management control chip product is supported by the Open Compute Project (OCP) OpenBMC open source firmware support, which can share BMC firmware development results with OCP members to concoct powerful computing performance.
	Launched the high-performance, low-power NuMicro® M480 series.
	High-performance Arm® Cortex® M4 core audio microprocessor for smart speakers and smart home appliances.
	High-performance Arm® Cortex® M4 audio microprocessor for mass production of game consoles.
	Supports Intel's Purley server platform for continuous shipment of BMC with the highest performance Arm® Cortex® A9 dual-core processor.
Mass production of 60V/80V and 600V UHV high pressure processes.	

Market Analysis

Nuvoton's main products are sold across the world. Asia was the main sales region for 2018.

Main Products (Services) Sales (Supply) Regions		
Sales Region	2018	
	Amount	Percentage(%)
Asia	9,598,222	96%
America	144,201	1%
Europe	135,310	1%
Other	162,488	2%
Total	10,040,221	100%

Unit: Thousand NTD

Production Value Table				
Year	2018			
	Main Products	Production Capacity*	Production	
Wafer			Die	
General Purpose IC	500	1	920,999	4,605,461
Foundry		394	-	1,289,602
Other		-	-	8,960
Total		395	920,999	5,904,023

Unit: Production Capacity (Thousand) / Wafer (Thousand) / Die (Thousand); Thousand NTD

Note: Production capacity is expressed through 6" wafers.

Responsibility to Our Investors

With innovation as the foundation for its operational guidelines, Nuvoton is committed to the development of new fields of application, and the expansion and strengthening of the company's capacities and technologies. Every year since Nuvoton became publicly listed in 2010, we have been continuously creating value for investors through dividend payouts and the maintenance of a stable financial structure.

To quickly share material information with our investors, we host investor conferences every half year to enhance communication and help them fully understand our quarterly financial figures and business condition. After the event, video recordings of the conference are uploaded to our website to serve as a reference. Additionally, major company activities, important events, and other related information can be found in the investor's area of Nuvoton's official website (<http://www.nuvoton.com/>).

Financial Performance

2018 Economic Performance Management Policies	
Importance	Continue to create corporate surpluses to create maximum benefits for shareholders and enhance corporate value.
Policies/Commitments	Master industry development trends to develop high value-added products and improve corporate governance and operational performance, becoming an industry benchmark which practices corporate sustainability.
Goals	Continue to focus on product optimization and increase market share to enhance competitive niche.
Promotion Priorities and Practices	Continue to track various financial performance indicators for risk analysis and assessment.
Performance Results	In 2017, gross margin amounted to 40%, profit margin 7.45%, and earnings per share (EPS) of NTD 3.32.

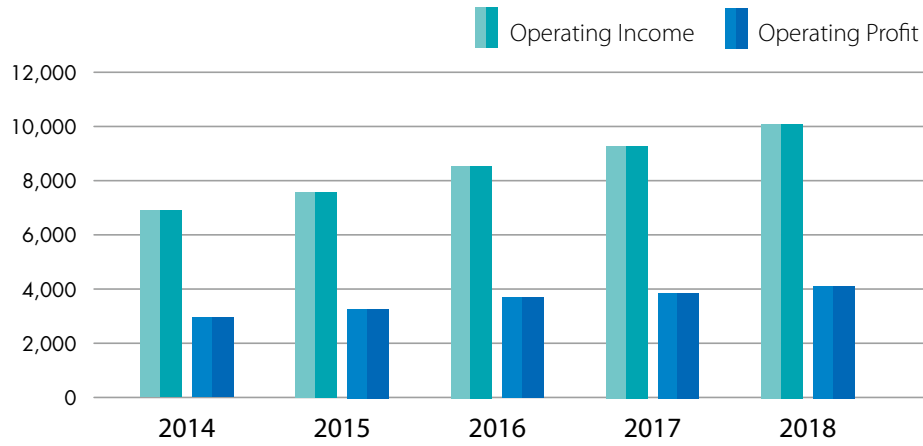
Nuvoton's 2018 consolidated revenue amounted to NTD 10.04 billion, up 9% from 2017; consolidated net profit after tax amounted to NTD 711 million, up 3% from 2017. For both 2018 and 2019, Nuvoton allocated earnings from the previous year. For these two years, the cash dividends issued were both 2.5. For 2017 and 2018, the earnings per share (EPS) were NTD 3.32 and NTD 3.42, respectively.

Financial Performance over the Past Five Years					
	2014	2015	2016	2017	2018
Operating Income	6,822	7,313	8,329	9,235	10,040
Operating Cost	3,926	4,263	4,921	5,503	6,127
Operating Profit	2,896	3,050	3,408	3,732	3,913
Net Profit Before Tax	421	572	709	799	839
Income Tax Expense	77	103	96	111	128
Net Profit After Tax	343	469	613	688	711
R&D Expense	1,973	1,970	2,216	2,388	2,524
Employee Benefits Expense	2,255	2,348	2,534	2,696	2,760
Total Assets	4,894	5,292	5,898	6,149	6,118
Retained Earnings	731	921	1,127	1,298	1,426
Total Equity	2,914	3,122	3,378	3,663	3,734

Unit: Million NTD

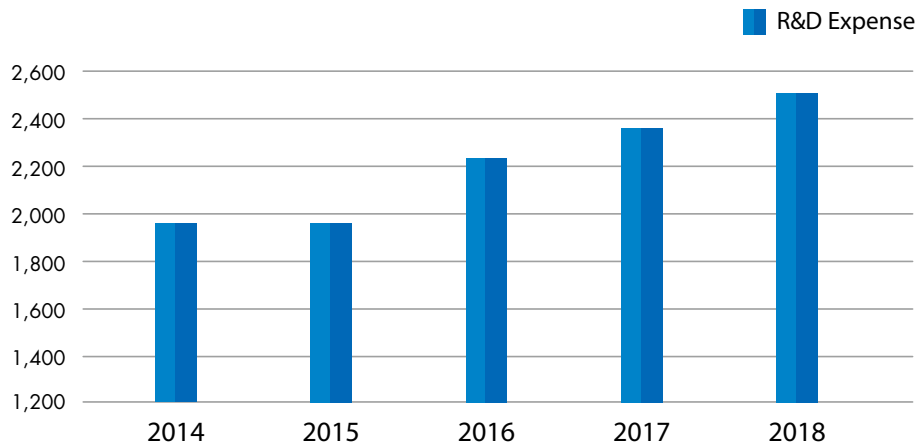
Consolidated Operating Income and Profit

Currency: NTD million



Consolidated R&D Expense

Currency: NTD million



Association (Guild) Membership

Nuvoton actively participates in industry associations, guilds, and technology alliances to obtain the industry's latest technology and establish good relationships with relevant units, contributing to the overall development of the industry.

External Organizations that Nuvoton are Involved with in 2018

Item	Name of Association (Guild)	Membership
1	The Allied Association for Science Park Industries	•
2	The Allied Association for Science Park Industries	•
3	Micro Sensors and Actuators Technology Consortium	•
4	Power Electronics Systems Consortium	•
5	Consortium of ESD Protection Technology for Circuits and Systems	•

Glory and Affirmation

In addition to performing exceptionally well in its main area of business, Nuvoton also adheres to the concept of sustainable development in the working environment. The awards and recognition received between 2014 and 2018 are listed in the table below:

Awards and Recognition Received between 2014 and 2018	
Year	Awards and Recognition
2018	<ul style="list-style-type: none"> Actively reduced electricity consumption in our plant area, and won the "Energy Conservation Elite" award from the Ministry of Economic Affairs.
	<ul style="list-style-type: none"> TPM security chip products jointly collaborated with the American software company, OnBoard Security Software, to jointly promote the complete security solutions of IoT software and hardware. This ensures that applications are protected from malicious hackers and have the highest level TPM2.0 safety certification for hardware.
2017	<ul style="list-style-type: none"> Actively participated in environmental training activities, becoming the "2017 Environmental Education Partner" of the Hsinchu Science and Industrial Park.
	<ul style="list-style-type: none"> Launched the new high-performance TPM2.0 chip (NPCT75x), which supports the latest specifications of TCG 2017, and has passed the Microsoft Win10 RS3 security chip performance test certification.
	<ul style="list-style-type: none"> The air pollution prevention and control personnel received the "Excellent Environmental Protection Personnel" award by the Hsinchu Science and Industrial Park.
2016	<ul style="list-style-type: none"> Launched security chip NPCT6xx which obtained TPM 2.0 Common Criteria certification.
	<ul style="list-style-type: none"> Nuvoton's innovative Internet of Things (IoT) development platform achieved ARM mbed OS certification.
	<ul style="list-style-type: none"> Ranked in the top 20% in the 3rd corporate governance evaluation.
	<ul style="list-style-type: none"> Recognized as a good water conservation unit by the Water Resources Agency of the Ministry of Economic Affairs.
	<ul style="list-style-type: none"> Received the good water conservation vendor award by the Science Park Administration of the Ministry of Science and Technology.
	<ul style="list-style-type: none"> The emission reduction for the Environmental Protection Administration's Advanced Program has amounted to 46,198 tons.
	<ul style="list-style-type: none"> Recognized as good occupational safety and health personnel by the Hsinchu Science Park Bureau.
2015	<ul style="list-style-type: none"> Launched first security chip in the world to obtain Common Criteria, FIPS and TCG certification at the same time.
	<ul style="list-style-type: none"> Launched world's first SIO and EC that supports both LPC and eSPI. Equipped with high performance 32-bit ARM based Cotex-M4 computing core, it provides the best solution to the platform management of PC, NB, and Chromebook.
	<ul style="list-style-type: none"> The 3rd "Taiwan MITTELSTAND Award".
	<ul style="list-style-type: none"> Hsinchu Science Park Corporate Environmental Excellence Award
	<ul style="list-style-type: none"> Honorary Mention, Nursing Room Competition (Workplace Division)
2014	<ul style="list-style-type: none"> Taiwan Corporate Sustainability Report Bronze Award
	<ul style="list-style-type: none"> Nuvoton ARM® Cortex®-M0 had its 100th million MCU shipment
	<ul style="list-style-type: none"> The 3rd "National Industrial Innovation Award" 2014 Award for International Trade Outstanding Export/Import Business Certificate





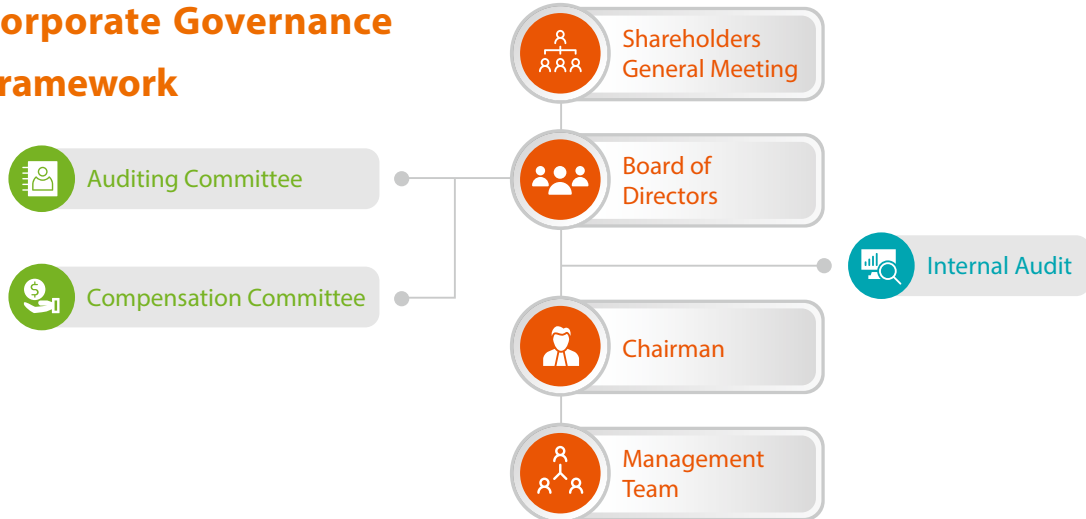
03 Corporate Governance

- Corporate Governance Framework
- Board of Directors
- Corporate Social Responsibility Committee
- Ethical Conduct and Internal Auditing System
- Regulatory Compliance
- Risk Management



Corporate Governance

Corporate Governance Framework



Board of Directors

Board of Directors Organization

Nuvoton’s Board of Directors utilizes a candidate nomination system. The directors are elected through a list of nominees at shareholders’ meetings. The 5th Board of Directors is comprised of 9 directors, among which 4 are independent directors, and 1 director is a woman.

Nuvoton’s Board of Directors is comprised of directors with professional backgrounds and technical experience. We rely on the knowledge, personal insight, and business acumen of each director in assuming responsibility for the operation and supervision of the company. The board members’ background information, academic qualifications, and concurrent positions in other companies, Board of Directors, and functional committees are disclosed in the company’s annual report. Information on the company’s annual report can be found on the Market Observation Post System and Nuvoton’s official website (www.nuvoton.com). To improve supervision functions and strengthen management functions, in addition to the Board of Directors, we have also set up an Auditing Committee

and the Salaries and Remuneration Committee to strengthen the structure of corporate governance.

Nuvoton Board Members		
Title	Name	Gender
Chairman	Representative of Winbond Electronics Corp.: Arthur Yu-Cheng Chiao	Male
Vice Chairman	Robert Hsu	Male
Director	Yung Chin	Female
Director	Ken-Shew Lu	Male
Director	Chi-Lin Wei	Male
Independent Director	Royce Yu-Chun Hong	Male
Independent Director	Allen Hsu	Male
Independent Director	David Shu-Chyuan Tu	Male
Independent Director	Je-Li Xu	Male

Board Member Responsibilities

Nuvoton’s Board of Directors is responsible for defining the company’s operating principles, long-term and short-term plans for development, annual business plan, and approving budgets and supervising the execution of company policies, as well as other material issues raised during shareholders’ meetings or board meetings. The board’s primary responsibility is to monitor compliance, financial transparency, the immediate disclosure of

important information, internal corruption, and other such areas. To fulfill its oversight responsibilities, the Board has established a variety of organizations and avenues, such as a Compensation Committee and internal auditors.

Nuvoton's management team must report the company's operating conditions and other important issues to the Board of Directors, and provide information and comments for the board's reference. Board meetings must be held at least once every quarter. 6 board meetings were held in 2018. Important resolutions are also immediately announced on the Market Observation Post System. As a response to the increasing international emphasis on corporate governance and corporate social responsibility development in recent years, in addition to scheduling annual training courses for the directors, Nuvoton also irregularly provides directors with professional training course information held by external units. More information is available on the Market Observation Post System.

In order to implement corporate governance and enhance the functions of the Board of Directors, Nuvoton stipulated the "Measures for the Compensation and Performance Evaluation of Directors" to strengthen performance assessment. Since December 2017, the directors have been evaluated on board operations, personal participation, and continuing education. The results of the assessment are summarized by the Compensation Committee and the Board of Directors, measuring the strategic direction of the Board of Directors while supervising the company operation management to for the benefit of long-term value for shareholders. The 2018 Board of Directors' self-evaluation results can be found in Nuvoton's 2018 annual report.

The Auditing Committee

Nuvoton established the Auditing Committee in June 2016. The committee members are mainly responsible for assisting the board in implementing and supervising the company in the quality and integrity of accounting, auditing, the financial reporting process, and financial control. For external investors, the committee represents an independent body that supervisors the company to actively protect the rights of investors.

Nuvoton's Auditing Committee is fully comprised of independent directors. There are currently 4 members, of which one is the convener. At least 1 member must have accounting or financial expertise. An Auditing Committee meeting is held at least once every quarter. Meetings are to be convened on an as-needed basis. 6 meetings were held in 2018.

Compensation Committee

Nuvoton established the Compensation Committee in 2011. Members of the Compensation Committee are appointed by the Board of Directors. Through a professional and objective perspective, this committee assesses, established and regular reviews the policies, system, standards, and structure of compensation for directors, supervisors, and managers of the company according to defined policies and systems, and makes recommendations to the board to serve as a reference for its decisions.

According to the "Compensation Committee Charter", the committee must be comprised of 3 or more members. Currently comprised of 4 independent directors, the Compensation Committee holds a general meeting at least once every six months. 2 meetings were held in 2018. More information about the Compensation Committee meetings can be found

Nuvoton's Auditing Committee Members	
Title	Name
Independent Director, Auditing Committee Chairman	Allen Hsu
Independent Director, Auditing Committee Member	Royce Yu-Chun Hong
Independent Director, Auditing Committee Member	David Shu-Chyuan Tu
Independent Director, Auditing Committee Member	Jei-Li Xu

Nuvoton's Compensation Committee Members	
Title	Name
Independent Director, Compensation Committee Chairman	David Shu-Chyuan Tu
Independent Director, Compensation Committee Member	Royce Yu-Chun Hong
Independent Director, Compensation Committee Member	Allen Hsu
Independent Director, Compensation Committee Member	Jei-Li Xu

in Nuvoton's 2018 annual report. The committee's articles of association are published in the investor's area of the company's website.



Company Overview



Corporate Governance



Customer Service and Supplier Management



Environment-Friendly



Best Workplace



Philanthropy

Corporate Social Responsibility Committee

Nuvoton established the Corporate Social Responsibility Management Committee in 2012 to improve the management of corporate social responsibility. The committee is responsible for corporate social responsibility policies, systems, and related management policies, as well as the formulation, implementation, and promotion of plans.

The chairman has designated a high-level supervisor to serve as the chair of the committee to convene functional groups that are responsible for promoting and implementing corporate social responsibility policies. Each year, the Corporate Social Responsibility Committee will set CSR performance objectives and project implementation measures. A regular meeting is held every six months to examine corporate social responsibility compliance and the implementation results of the various programs. Since 2016, the Corporate Social Responsibility Committee has given an annual CSR performance report to the Board of Directors every year.



Code of Conduct and Regulatory Compliance

2018 Code of Conduct and Regulatory Compliance Management Policies	
Importance	<ul style="list-style-type: none"> Nuvoton complies with various domestic and foreign regulations to prevent its operations from being exposed to risks. We also avoid engaging in illegal and unfair competition to establish a good corporate image and ensure legal operation.
Policies / Commitments	<ul style="list-style-type: none"> To ensure the implementation of integrity management and regulatory compliance, Nuvoton continues to focus on domestic and foreign policies and laws that may affect its businesses and finances, and regularly promote the core values of integrity management
Goals	<ul style="list-style-type: none"> The completion rate of the annual code of conduct and regulatory compliance training is above 95%. Nuvoton has had no major illegal events.
Promotion Priorities and Practices	<ul style="list-style-type: none"> Through educational training and communication, Nuvoton continues to strengthen correct professional ethics and legal concepts of employees. An internal control system was established for regulatory compliance based on the implementation and measurements, including the effectiveness of the current control system covering all company operations. Conduct regular regulatory tracking, identification, and implementation to comply with relevant regulations.
Performance Results	<ul style="list-style-type: none"> The completion rate for the annual corporate social responsibility related regulation compliance staff training was 95%. There were no violations of local laws or major lawsuits in 2018.

Adherence to Ethical Values

Nuvoton complies with domestic and foreign ethics laws and regulations, and pays close attention to updates or changes made to regulations and decrees. Nuvoton regularly stipulates or amends internal related work practices or measures. "Corporate Social Responsibility Best Practice Principles", "Ethical Corporate Management Best Practice Principles", "Integrity Management Breach Measures", and "Corporate Social Responsibility Code of Conduct" requires Nuvoton's overall operating activities to comply with relevant laws and regulations. We conduct annual corporate integrity educational training courses every year on "corporate social responsibility policies" and "integrity management". Each employee is provided with a "Corporate Social Responsibility Policy and Statement Promotion Card" to strengthen corporate social responsibility and the ethical values of all employees.

Under Nuvoton's Corporate Social Responsibility Code of Conduct, Ethical Business Conduct Guidelines (hereinafter referred to as "Guidelines") are defined that require all employees of Nuvoton to abide by the highest standards of integrity, and to ensure compliance with all laws and regulations. The guidelines are as follows:

- Comply with all relevant government regulations and international norms.
- Ensure business integrity, and prohibit all acts of bribery, corruption, extortion, and embezzlement.
- Do not offer or accept improper benefits, and avoid conflicts of interest.
- Emphasize corporate governance, disclose company information in accordance with laws and regulations, and avoid being hypocritical.
- Comply with principles of good faith and fair trade. Do not conduct exaggerated/false advertising and marketing.
- Provide a safe and healthy working environment.
- Implement "Customs-Trade Partnership Against Terrorism (C-TPAT)" program guidelines in daily operations.
- Respect internationally-recognized labor principles and rights. Do not hire people under the ages of 15 or involuntary personnel (through coercion, mortgage, debt, indentured servitude, enslavement, or human trafficking).
- Ensure that all employees enjoy equal rights without discrimination.
- Do not harass, unlawfully discriminate, coerce, or inhumanely treat employees (including prospective employees).
- Do not use internationally banned substances in the production processes.
- Comply with all relevant environmental protection regulations and laws.
- Respect intellectual property rights and protect the personal information of those who do business with us.
- Require suppliers to comply with all relevant laws while emphasizing corporate social responsibility.

Training

To help employees establish correct legal concepts and enhance their understanding of corporate social responsibility, Nuvoton regularly holds business integrity educational training courses on "Corporate Social Responsibility Policies" and "Integrity Management". The courses explain the regulations in a clear and easy way, and employees are required to take tests after the courses to enhance their understanding of related legal compliance.

The 2018 educational training data on the compliance of relevant laws and regulations of corporate social responsibility are as follows:

New Staff Training Data		
	Corporate Social Responsibility Code of Conduct	Integrity Management
Number of Trainees	109 人	109 人
Number of Trainees	100%	100%

General staff training data

	Corporate Social Responsibility Code of Conduct	Integrity Management
Number of Trainees	1,336 人	1,331 人
Completion Rate	98%	98%

Grievance Mechanism

We have also set up many grievance channels, such as a physical suggestion box and an inbox for internal disclosure of illegal activities. Nuvoton has also established reporting areas on internal and external websites, so if there are any unjust or unfair illegal acts, internal or external personnel can conduct anonymous or named reports through various grievance channels. When a complaint is received, a specialized group will start an investigation. No complaints were received during 2018.

Internal Auditing System

Nuvoton has set up an internal auditing unit under the board of directors. In accordance with the company size, business conditions, management needs, and other relevant laws and regulations, Nuvoton has appointed a total of two full-time internal auditors. Nuvoton established its internal control system according to laws and regulations, which is based on the implementation and measurement of all Nuvoton business operations as well as the effectiveness of the current internal control system of Nuvoton and its subsidiaries.

The internal auditing unit prepares an annual audit plan based on the results of the risk assessment, which are then approved by the Auditing Committee and the board of directors. The internal auditing unit operates according to the auditing plans.

The internal auditing unit reviews Nuvoton's internal control system and various operations through the aforementioned auditing work, assisting the board and the management to reasonably confirm the achievement of related objectives such as operation, reporting and compliance: the effectiveness and efficiency of operations include achieving operational and financial performance objectives and maintaining asset security, as well as the reliability, timeliness, transparency of internal and external financial reporting and non-financial reporting and its compliance with relevant laws and regulations.

The internal auditing unit supervises the various units and subsidiaries in their annual self-inspections of the

effectiveness of their internal control systems. Then, the internal auditing unit reviews the self-inspection reports of all units and subsidiaries, as well as the effectiveness of their internal control systems. The consolidated self-inspection results serve as a basis for the board and president in their Internal Control Systems Statement.

Regulatory Compliance

Nuvoton has customers from all over the world. To ensure the implementation of integrity management and regulatory compliance, we continue to pay attention to domestic and foreign policies and regulations that may affect Nuvoton's businesses and finances. We also regularly promote the core values of integrity management.

Nuvoton complies with the Company Act, Securities and Exchange Act, Business Entity Accounting Act, Political Donations Act, Anti-Corruption Act, Fair Trade Act, and other related laws. Furthermore, Nuvoton has stipulated corporate governance rules and procedures for employees to follow.

For personal data protection, the General Data Protection Regulation (GDPR) is applicable as of May 25th, 2018 for all individuals within the European Union (EU). Complying with this new regulation, Nuvoton has implemented the following measures in 2018:

1. Update the site's privacy policy.
2. Provide a description of GDPR to employees to enhance the value placed on personal data protection.
3. Strengthen the protection of personal data storage to prevent leakage.

Furthermore, Nuvoton has launched compliance-related programs and courses to provide employees with a better understanding of intellectual property rights. The courses also stress the importance of protecting trade secrets, helping employees become more familiar with the latest laws and regulations. Nuvoton employees can check relevant training

course information and promotional materials on the internal website to further ensure our commitment to compliance. All Nuvoton employees participate in compliance policies. Cooperation between various departments improves execution performance.

2018 Legal-related Training Courses

Course Name	Number of Trainees
New Employee Orientation - Common Discipline_Legal Issues Relevant to Professional Workers	62
New Employee Orientation - Common Discipline_ Patent Search: How to Write a Patent	45

Regulatory Identification and Inspection

In order to monitor and identify the applicability and compliances of labor, ethics, environmental protection, health, corporate governance related laws and regulations, and other requirements, Nuvoton has a dedicated unit which conducts applicability identification and conformity checks on the relevant laws and regulations of newly added or revised rules on a regular basis every six months. The results of the identification tests will be reported at the Corporate Social Responsibility Committee meetings, and the relevant information will be updated on the Nuvoton's internal corporate social responsibility website for reference. Starting from 2018, Nuvoton complies with the Responsible Business Alliance's (RBA) Code of Conduct to conduct regulatory inspections on a quarterly basis. The 2018 applicable laws and changed compliance identification results were both compliant.

Applicable Laws and Changed Compliance Identification Tests

Legal Period	Testing Results
First Half of 2018	Compliant
Second Half of 2018	Compliant

Risk Management

Financial Risk

1. The influence of interest rate fluctuations:

At present, Nuvoton uses its own funds for operating expenses, so interest rate fluctuations will not have a significant impact on operations. Furthermore, Nuvoton maintains good relationships with multiple financial institutions and can receive lower interest rates when needed. Therefore, interest rates will not have a significant impact on company operating costs.

2. The influence of exchange rate fluctuations:

Nuvoton's exchange rate risk is mainly attributable to the business activities. For the exchange rate risk arising from purchases or sales, there's a general offset of foreign currency income and foreign currency expenditure. We also maintain close relations with financial institutions and continuously observe exchange rate changes to reduce the risk of exchange rate fluctuations. We continue to implement the following response measures against exchange rate fluctuation risks:

A. We utilize the transactions of derivative financial products, and our selection of trading commodities are mainly based on hedging risks arising from our business operations. In addition, when selecting the trading targets, we first take into account credit risk to avoid loss caused by default. In selecting transaction targets, we select from financial institutions that we have a good relationship with and that can provide professional information.

B. Nuvoton keeps abreast of financial market information, evaluates trends, and is familiar with financial products, regulations, and operational skills to provide sufficient and timely information to the management and relevant departments for reference.

C. The maximum unrealized loss of all contracts undertaken by Nuvoton for derivative financial commodity transactions is limited to 20% of the total contract amount, or 3% of the owner's equity, whichever is lower. The financial unit conducts periodic monthly evaluations and prepares a report, which is reported to the head of the financial unit and senior executives authorized by the board of directors to predict the risks and possible profits and losses of each transaction.

3. The influence of inflation:

Nuvoton will continue to actively manage costs and operating expenses in the future to mitigate the impact of inflation on operations. Currently, there has not yet been any significant inflation in domestic or foreign markets that have had any significant impact on Nuvoton.

<p>Information Security Risk</p>	<p>Nuvoton has stipulated " Nuvoton Security Policies" and "Information Security Management Measures", and has established control measures to protect Nuvoton 's information and information systems from theft, computer crime, industrial espionage or other forms of damage or loss. In view of new cyberattacks and the constant threat of security, Nuvoton regularly holds information security management meetings. In addition, we also analyze and evaluate information security risks to establish management plans and regular tracking for projects that may cause risks. To enhance employee awareness of information security, Nuvoton arranges employees to take online learning courses in information security online, and also conducts social engineering exercises from time to time. These measures serve to continuously improve our ability to protect against information security risks.</p>
<p>Risks to Health and Safety</p>	<p>Nuvoton has set up a company-wide "Environmental Security and Risk Management Committee". The committee holds a meeting every quarter to discuss daily health and safety management issues and to promote occupational safety and health, health management, environmental protection and damage prevention results, regulatory compliance, and constant improvement plans. The meetings serve to implement safety and health communication.</p>
<p>Supplier Risk</p>	<p>Vendors with stable levels of supplies are an important part of maintaining competitiveness. With current degrees of globalization, a natural disaster or accident might affect the stability of the entire supply chain. As a result, we uphold the principle of "many suppliers from many locations" in establishing sources for materials. Long-term agreements with major raw material suppliers not only help increase our own inventory, but also enables zero risk delivery through consignment. If we are unable to establish a second supplier for a particular item, then we request vendors and distributors to prepare safety stock, while using the Just-in-time (JIT) method to reduce supply risk.</p>





04 Customer Service and Supplier Management

- Customer Service and Satisfaction
- Customer Satisfaction Survey
- Protecting Customer Privacy
- Regulatory Compliance for Products
- Sustainable Supply Chain Management



Customer Service and Supplier Management

2018 Customer Service and Privacy Management Policies

Importance	<ul style="list-style-type: none"> Adhering to the philosophy of meeting customer needs, Nuvoton provides excellent and competitive product quality and services to gain the trust of customers. Nuvoton is committed to protecting the confidential information of customers to ensure the rights of the company and its customers.
Policy / Commitment	<ul style="list-style-type: none"> To guarantee that the quality and reliability of its products will completely satisfy the needs of its customers, Nuvoton is committed to delivering competitive products with "zero defects".
Goals	<ul style="list-style-type: none"> Provide excellent service and good quality to become the best partner for customers.
Promotion Priorities and Practices	<ul style="list-style-type: none"> Customer Service: Implement a range of quality control mechanisms and regular customer satisfaction surveys to ensure product quality and reliability. Nuvoton signs confidentiality agreements with customers to protect confidential customer information. We also have a confidential data protection program to prevent data from being leaked, properly protecting customer privacy.
Performance Results	<ul style="list-style-type: none"> 2018 customer satisfaction surveys show average satisfaction at above 4 points. All indicator scores were higher than that of 2017. In 2018, there have been no occasions in which products or services have violated relevant health, safety, or voluntary guidelines (products and services still within their life cycle). In 2018, there have been no complaints about proven breaches of customer privacy or loss of customer data. In 2018, there have been no significant fines or violations of the law/regulations regarding the distribution or use of products or services.

Customer Service and Satisfaction

To guarantee that the quality and reliability of its products will completely satisfy the needs of its customers, Nuvoton is committed to delivering competitive products with "zero defects". Methods used include quality control, reliability assurance, and failure analysis.

Quality Control

Nuvoton implements a series of quality control mechanisms that covers every step of the production process. The main steps to its quality control operations include raw material inspection, wafer fabrication process, electrical characteristics test, and die packaging. Nuvoton continuously monitors every step of the manufacturing process. By doing so, Nuvoton is able to gather information about every layer of feedback, detect problems quickly and efficiently, and conduct an assessment analysis

followed by corrective measures. The company emphasizes that every step of the manufacturing process must be "done right the first time" to result in an output with "zero defects", thereby establishing high-quality and reliable product lines.

Reliability Assurance

At Nuvoton, the purpose of the reliability assurance test is to ensure high-end product performance throughout the expected product life cycle. Each manufacturing stage undergoes constant review, analysis, and evaluation. Amendments are made to improve quality and reliability.

Failure Analysis

Customers may return defective products to Nuvoton. In the event of this, Nuvoton discusses with the customer the most appropriate method to replace, replenish, or offer a discount to compensate for any loss incurred by the customer. Meanwhile, Nuvoton completes a comprehensive physical and electrical

test as well as a failure analysis on any defective integrated circuit (IC) to determine the root causes of product failure, and respond with corrective actions and measures for improvement. Furthermore, Nuvoton closely monitors this process to ensure that measures

for improvement are effectively implemented, while providing customers with a detailed written report of the failure analysis.

Customer Satisfaction Survey

Nuvoton's quality assurance unit regularly gathers customer feedback to gain valuable suggestions and insight into the level of customer satisfaction in regard to new product marketing/sales, delivery, quality improvement, technical support, and customer service. Interviewees include purchasing, quality assurance, research and development, and other such units.

The quality assurance unit summarizes customer reviews, complaints, satisfactions, and suggestions for improvement before convening the Business Department, Sales Department, R&D Department, and Production Management Department to answer each customer feedback and draw up improvement plans. They are required to propose improvement plans within a month to serve as Nuvoton's performance goal and respond to customers so customers can receive direct and immediate feedback. The quality assurance unit delivers the final consolidated results to management to serve as a resource to continue improving satisfaction.

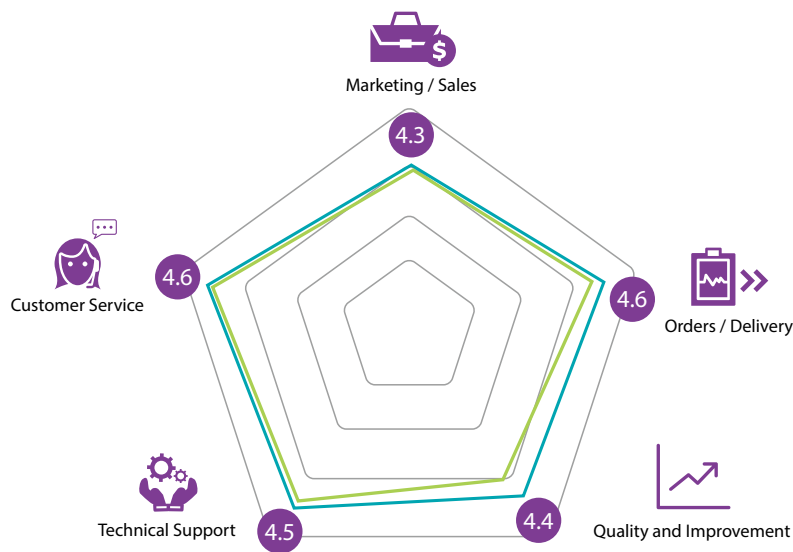
Customer Satisfaction Survey Results

The assessments of each satisfaction indicators include the following items:

- A. Marketing / Sales: Development speed of new products, application files, new product features / breadth, new product information / promotion / propagation
- B. Orders / Delivery: Flexibility of receiving orders, response time for orders, on-time delivery, product packaging
- C. Quality and Improvement: Defect rate, sample quality, analysis of defects, improvement measures
- D. Technical support: Prompt technical support, analysis capabilities, development flexibility
- E. Customer Service: communication channels, service attitude, response speed, professional knowledge, processing returned purchases

Lowest rating: 1. Highest: 5.

Ratings are classified as follows: (1) Very Unsatisfied, (2) Unsatisfied, (3) Average, (4) Satisfied, (5) Very Satisfied.



- 2018
- 2017
- All items have satisfied ratings (4 and above). All indicators scored better than that of 2017.
- Customers were most satisfied with Customer Service and Orders / Delivery, which continues to gain satisfaction ratings from customers.

Protecting Customer Privacy

In addition to enhancing customer service, Nuvoton also values the protection of customer privacy and intellectual property rights. Nuvoton signs confidentiality agreements with customers to protect confidential customer information. We also utilize a confidential data protection process to ensure that there is no risk of data leakage to protect customer privacy. Nuvoton has not received any complaints regarding breaches of customer privacy or leaked confidential information in 2018.

The Degree of Customer Privacy Protection and Product Compliance in 2018

2018 Indicators	Result
Total number of occasions in which products or services have violated relevant health, safety, and voluntary guidelines (products and services still within their life cycle)	0
Total number of complaints about proven breaches of customer privacy or loss of customer data	0
Total number of significant fines due to violations of the law and/or regulations regarding the distribution and/or use of products or services	0

Regulatory Compliance for Products

Nuvoton requests that all products use materials that comply with the European Union Restriction of Hazardous Substances Directive (EU ROHS), REACH, and halogen-free requirements. Nuvoton has also reduced the use of chemical substances in its manufacturing process. There were no violations of laws or regulations between 2018, meeting both international regulations and customer requirements.

Sustainable Supply Chain Management

Sustainable Supply Chain Management Policies

Importance	<ul style="list-style-type: none"> Establish a stable and secure supply chain to ensure the quality of raw materials and provide customers with quality services.
Policy / Commitment	<ul style="list-style-type: none"> Nuvoton treats suppliers as partners to build a stable supply chain. In recent years, Nuvoton has been committed to the local production of raw materials for the purpose of reducing transportation costs, diversifying risk, and reducing carbon emissions. Furthermore, Nuvoton hopes to increase employment opportunities by cultivating local production.
Goals	<ul style="list-style-type: none"> Nuvoton adopts the Responsible Business Alliance's (RBA) Code of Conduct and is committed to the promotion of corporate social responsibility. In addition to quality, delivery and price, Nuvoton also confirms that suppliers' labor, ethics, environment, management system, and health and safety regulations comply with the latest regulations. We seek to fulfill our CSR vision of "providing a sense of safety, reassurance, and empathy".
Promotion Priorities and Practices	<ul style="list-style-type: none"> The selection, regular evaluation, and coaching of existing suppliers ensure that partner suppliers meet the requirements of Nuvoton.

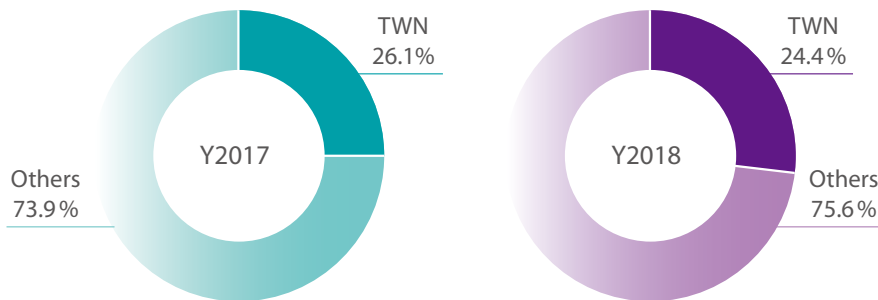
Performance Results

- In 2018, the monetary proportion of raw materials purchased in local areas was 24.4%, down 1.7% from 2017.
- In 2018, approximately 93.1% of our supply chain vendors have environmental related certification. Vendors which were unable to obtain certification in time were required to establish a verification schedule.
- Nuvoton's top 80% packaging and testing plants and raw material vendors (a total of 9 plants and vendors) have conducted corporate social responsibility self-evaluations in 2018. The self-evaluation results comply with the requirements of Nuvoton.
- In 2018, all of Nuvoton's outsourced wafer processing manufacturers packaging plants, packaging plants, and raw material suppliers (WF6 gases) have signed the "Statement of Non-use of Conflict Minerals"

Localized procurement

Since its inception, Nuvoton has always considered its suppliers as long-term partners towards achieving the common goal of establishing a stable semiconductor supply chain. In recent years, Nuvoton has been committed to the local production of raw materials for the purpose of reducing transportation costs, diversifying risk, and reducing carbon emissions. Furthermore, Nuvoton hopes to increase employment

opportunities by cultivating local production. In 2018, the monetary proportion of raw materials purchased in local areas was 24.4%, down 1.7% from 2017. However, due to industrial limitations, Nuvoton will still maintain close relationships with local suppliers in the future, while striving to reduce overall costs and risks together by achieving win-win situations. Localized procurement is an important strategy for Nuvoton when choosing suppliers.



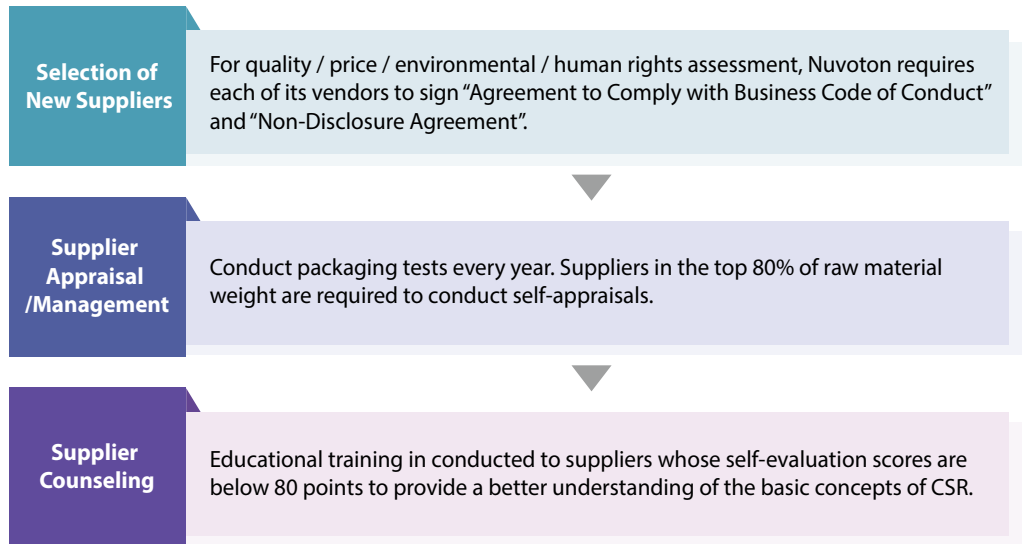
Supply Chain Management

Nuvoton stands firm in its commitment to promoting corporate social responsibility. In addition to the factors of quality, delivery, and price, Nuvoton also takes the following approaches to managing its suppliers in order to confirm that the labors, ethics, environment, management systems, health, and safety of suppliers meet the latest regulations, so we can fulfill our corporate social responsibility vision of "providing a sense of safety, reassurance, and empathy".

- In addition to complying with industrial safety and environmental protection requirements, Nuvoton also requires suppliers to focus on promoting CSR together.
- Based on principles for the protection of human rights, Nuvoton pays close attention to the issue of conflict minerals. For the raw materials in its production processes, Nuvoton is committed to avoiding the use of minerals obtained from illegal mining operations that stand in violation of human rights.
- Nuvoton pays close attention to how labor rights are respected throughout its supply chain, and requires suppliers to comply with the laws of the countries they operate in and relevant international industry practices, including Code of Conduct by the Responsible Business Alliance (RBA) as well as any subsequent changes or amendments.

Supply Chain Management Method

To establish a supply chain management mechanism with sustainable growth, Nuvoton utilizes the following three methods for control and counseling for its supply chain management



Selection of New Suppliers

Nuvoton assesses quality, price, environmental protection, and other such factors in selecting vendors. Vendors must meet our requirements to become a qualified supplier for Nuvoton. In 2018 a total of 18 vendors were selected.

- Environmental Management System Certification
Nuvoton requires its supply chain vendors to obtain international certification, such as the Environmental Management Systems Standard ISO 14001. If a vendor is unable to obtain certification immediately, they are required to establish a schedule to do so. To date, approximately 93.1% of our supply chain vendors have environmental related certification.
- Ethical Requirements
Nuvoton actively adopts the Responsible Business Alliance's (RBA) Code of Conduct. Nuvoton requires each vendor to sign an "Agreement to Comply with Business Code of Conduct" and a "Confidentiality Agreement", which compel them to trade and transact honestly without undermining the interests or image of Nuvoton.

● Conflict Minerals Management

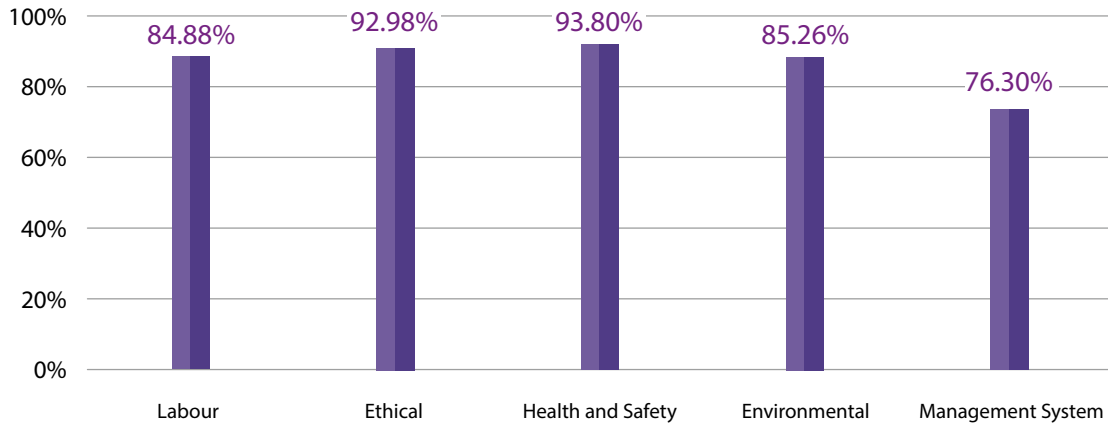
Nuvoton requires related vendors, including outsourced wafer processing manufacturers, packaging plants, and raw material suppliers (WF6 gasses) to sign a "Statement of Non-use of Conflict Minerals".

Supplier Assessment

● Supplier Corporate Social Responsibility Self-evaluations

In 2018, Nuvoton had its packaging and testing plants and top 80% of raw material vendors (a total of 9 plants and vendors) conduct corporate social responsibility self-evaluations. The self-evaluations scores were all higher than 80, which meet Nuvoton requirements. The proportion of each indicator to the full score in 2018 is indicated below. The chart shows that each manufacturer attaches the most importance to health and safety-related issues, and the CSR-related management system accounts for the lowest proportion. In 2018, there was no clear disclosure of the issue of forced labor risk, and it is expected to be included in the vendor self-evaluation item in the future.

2018 Supplier Corporate Social Responsibility Self-evaluation Results

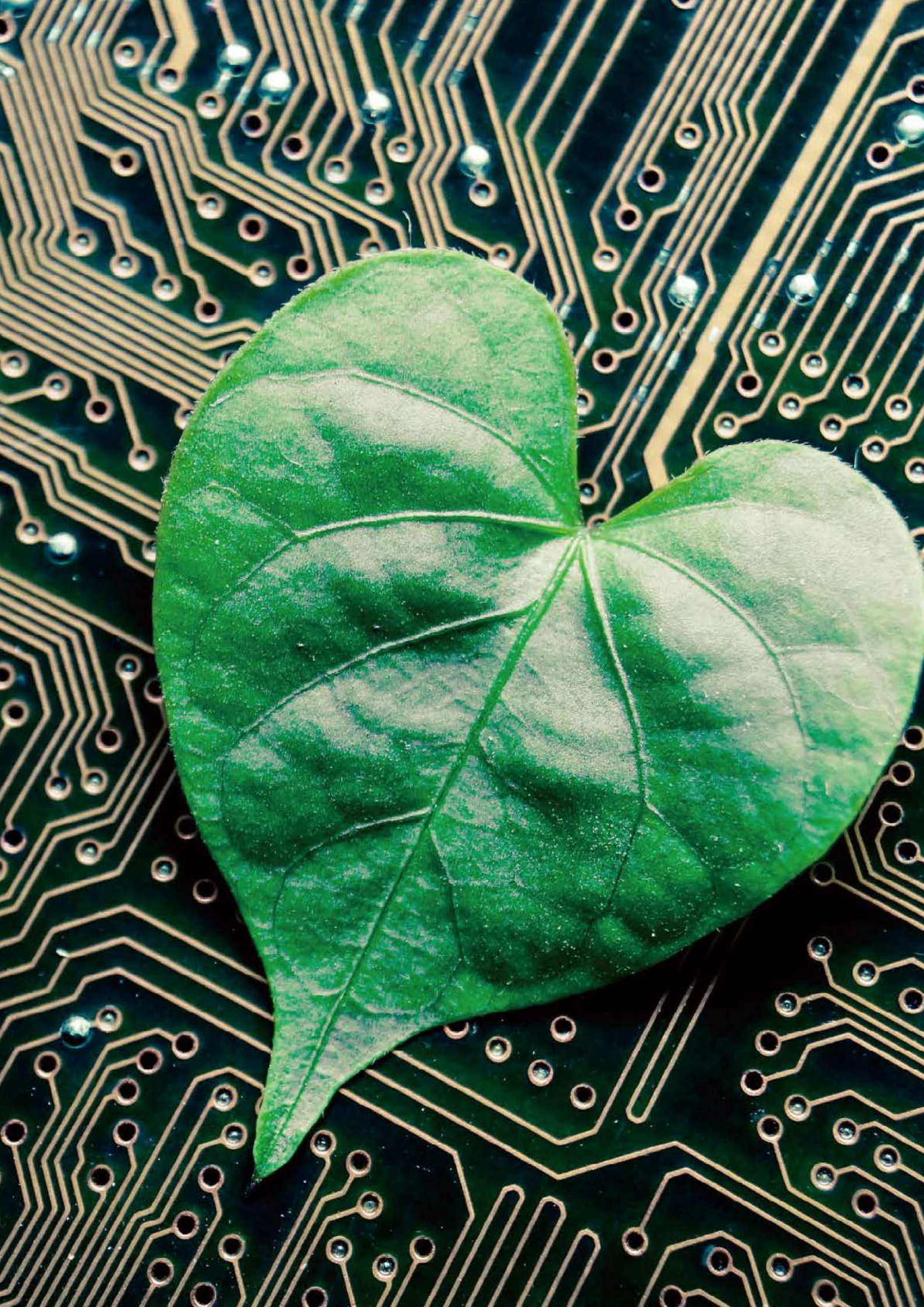


• Conflict Mineral Investigation Reports

Nuvoton requires related vendors, including outsourced wafer processing manufacturers, packaging plants, and raw material suppliers (WF6 gasses), to investigate and disclose conflict minerals in a due diligence report. Survey intervals are conducted in accordance with the Responsible Business Alliance's (RBA) Code of Conduct. Nuvoton conducts conflict mineral investigations for the above suppliers (including outsourcers), and the suppliers are all in compliance with relevant regulations.

Supplier Counseling

- Every six months, Nuvoton reviews the overall performance of suppliers in terms of quality, delivery and sustainability. In addition, suppliers are required to continue to improve in order to meet the Nuvoton requirements for suppliers.
- If the CSR self-assessment scores are below 80, educational training will be conducted for suppliers to strengthen the understanding of basic CSR concepts to facilitate follow-up CSR implementation. There were no underscored supplier CSR self-assessments in 2018.





05 Environment -Friendly

- Environmental Management
- Cherishing our Resources
- Pollution Prevention
- Greenhouse Gas Management
- Green Products



Environment-Friendly

Complying with environmental laws, regulations, and international standards, Nuvoton is committed to becoming a green enterprise with sustainable development. We are also committed to continuous improvement. We strive to reduce the impact of production on the environment, and eliminate any foreseeable environmental pollution risks through source reduction and company-wide participation to protect the natural environment. In our production operations and activities, we will continue striving to achieve a level of development that balances economic, social, and ecological factors.

Environmental Management

Environmental Management System

Nuvoton strives towards its goal of “continuous improving to become a green business with sustainable development”. Nuvoton draws from the spirit of ISO 14001 and OHSAS 18001 PDCA to continuously improve our Environment, Safety, and Health (ESH) Management System. Through process optimization and company-wide participation, we continue to reduce the use of key raw materials and the emission of pollutants in accordance with environmental regulations. We obtained ISO14001

and OHSAS18001 certifications when Nuvoton was founded in 2008. In 2016, we passed ISO14001 2015 certification, incorporating the concept of life cycles into our environmental management system.

In addition to promoting daily environmental management related businesses through organization, Nuvoton has also set up an ESH and Risk Management Committee to regularly address and review law compliance, issues of interest to stakeholders, and programs for continuous improvement of the environment. The committee has organized specific groups, such as the energy-saving and greenhouse gas reduction group, to research reduction targets and guidelines for important environmental issues, and implement various related reduction programs.

Environmental Management Strategy

With an environmentally friendly attitude, Nuvoton has stipulated three major environmental protection strategy items: “cherishing resources”, “reducing emissions”, and “developing green products”. Through the promotion of cleaner production and the continuous improvement of the ESH system, Nuvoton strives to reduce the impact that products and production activities have on the environment.

Nuvoton actively promotes cleaner production. In 2015, Nuvoton obtained the “Cleaner Production Evaluation System” certification from the Industrial Development Bureau, Ministry of Economic Affairs. In 2018, we passed the extension application review, and we effectively and actively utilize resources to prevent pollution and reduce the impact of production on the environment.

Cherishing Resources

2018 Customer Service and Privacy Management Policies

Importance	<ul style="list-style-type: none"> • The world is in a state of resource shortage. Thus, Nuvoton strives to improve the efficiency of energy use and recycling to achieve a stable energy supply, and thereby accomplish sustainable business and environmental sustainability goals.
Policy / Commitment	<ul style="list-style-type: none"> • Continue to improve energy and resource efficiency by complying with energy laws and regulations. • Give priority to energy-saving or energy-efficient products and services to ensure access to information resources and improve energy efficiency. • Advocate full participation in energy conservation and carbon reduction, and reducing greenhouse gas emissions. • Regular review energy targets and the implementation of energy management systems.
Goals	<ul style="list-style-type: none"> • Effectively control energy use, and conduct annual reviews to reduce energy use.

<p>Promotion Priorities and Practices</p>	<p>For the energy resources used - electricity, diesel, natural gas and chemical raw materials, Nuvoton utilizes the following promotional methods:</p> <ul style="list-style-type: none"> • Establish energy management measures, such as: air-conditioning zone management (factory, office area), setting up maintenance plans, improving the service life of equipment and reducing power consumption, prioritizing energy conservation when using or purchasing equipment, etc., in order to enhance the concept of energy conservation and sustainable development. • Effectively control the energy use of energy-consuming equipment in factories, and regularly review and formulate improvements through the Environmental Safety Committee or the cost down meetings. • Cooperate with the government's philosophy to effectively execute and implement energy conservation and carbon reduction.
<p>Performance Results</p>	<ul style="list-style-type: none"> • Implemented a total of 7 power-saving measures, reducing electricity consumption by 161 million kWh/year. • Nitrogen consumption per unit of product continued to decrease, which was reduced by 61.1% compared to base year 2009. • The use of sulfuric acid per unit of product continued to decrease, which was also reduced by 37.2% compared to base year 2009.

Nowadays, with the increasing advancement of technology, aggravating energy consumption is accompanied by the threat of global warming and climate change. It is necessary to cherish existing resources and prevent the crisis of energy exhaustion in order to maintain a sustainable environment. Optimized adjustment, source reduction and reducing water, electricity, energy, and key chemical raw materials have always been one of Nuvoton's most important environmental strategies. Reduced usage can decrease the impact on the environment and also cut cost, achieving a win-win situation of environmental protection and economic benefit.

Energy Conservation

Nuvoton mainly draws its energy from purchased electricity, followed by natural gas and a small amount of diesel fuel and gasoline. Taiwan's energy supply sources are mainly from oil, coal, natural gas, nuclear power, and hydropower. Other energy sources such as solar energy, wind energy, geothermal energy, and biomass energy are still the minority. Thus, the majority of Taiwan's energy supply structure and power generation structure are high carbon types, which cannot be replenished after they are mined. Furthermore, pollution generated by the burning of fossil fuels will not only affect the environment, but also destroy the complex regulatory mechanisms of nature, causing climate anomalies. Thus, energy conservation should be a goal for every corporation.

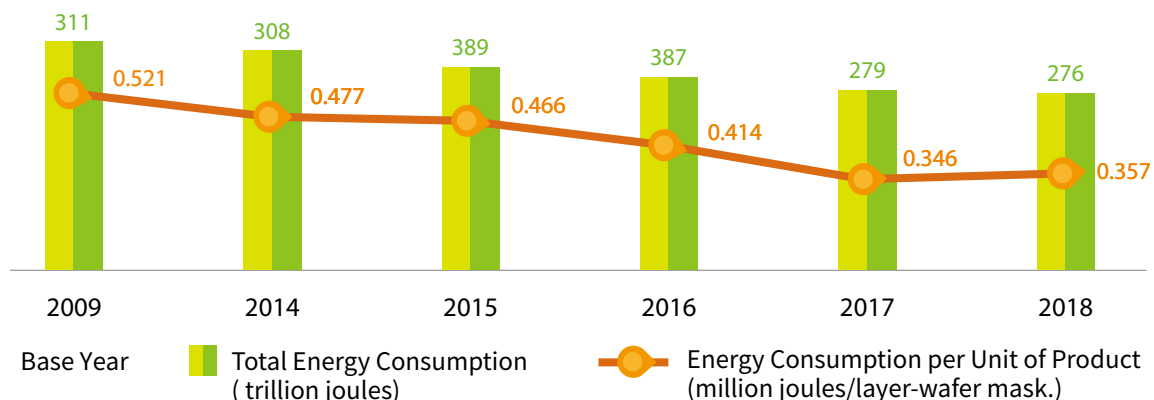
• Energy Consumption

Nuvoton's energy consumption in 2018 was mainly electricity, which accounted for approximately 96.6% of total energy consumption; gas (natural gas and liquefied petroleum gas) accounted for approximately 3.3% and fuel (diesel and car gasoline) accounted for less than 0.1%.

• Energy Intensity

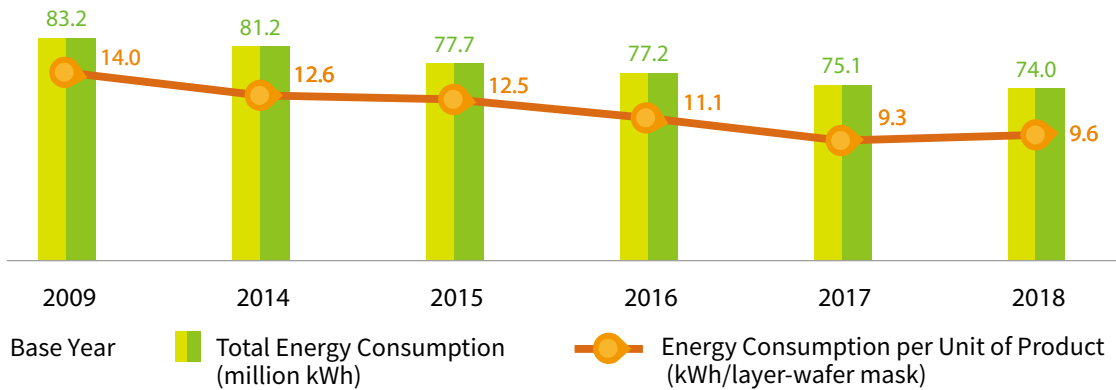
① Energy Consumption Statistics:

Nuvoton's total energy consumption in 2018 amounted to 276 trillion joules, and energy consumption per unit of product amounted to 35.7 million joules/layer-wafer mask.



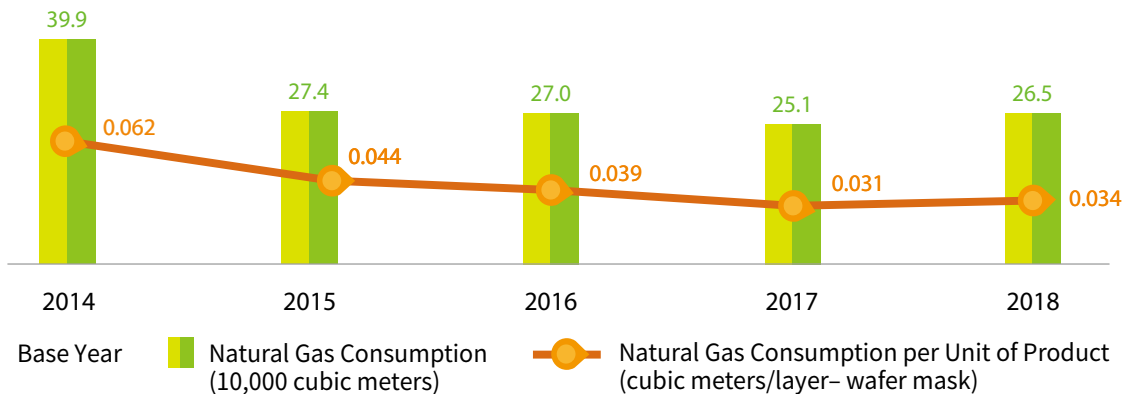
② Electricity Consumption Statistics:

Nuvoton's total electricity consumption in 2018 amounted to 74.0 million kWh, and energy consumption per unit of product amounted to 9.6 kWh/layer-wafer mask.



③ Natural Gas Consumption Statistics:

Nuvoton has been using natural gas since 2011. The kitchens started to use natural gas in April 2013. We adjusted the optimal usage of natural gas equipment from 2017. Natural gas consumption in 2018 amounted to 265 thousand cubic meters; natural gas consumption per unit of product amounted to 0.034 cubic meters/layer-wafer mask.



● Energy Conservation Measures

Nuvoton's main energy conservation policy is to reduce the demand for energy, reduce energy consumption, and improve operating efficiency. For our main methods of saving electricity, we have implemented temperature and humidity optimization control range to reduce electricity consumption in our semiconductor foundry, testing facilities, finished products, and raw material warehouses, all of which use a larger proportion of electricity consumption. In our offices and laboratories, we have promoted energy-saving habits such as turning off the lights, air conditioning, and machines when getting off work. For natural gas usage, we implemented optimized combustion of organic waste exhaust, and also recycle waste to reduce the overall use of natural gas. To improve power efficiency, we added refrigerant polarizers to the water-cooled chillers, set up an exhaust windmill frequency converter, added cooling ducts to the cooling tower, and adjusted the electric boiler to an optimized pressure to avoid excessive heating and enhance power efficiency. In our office areas, we adjusted the ice water pressure and the minimum temperature of air conditioning to avoid setting the temperature too low. We have also adjusted lighting configurations and have been gradually replacing lights with LED lighting. We are also planning to replace the high-consumption air-cooled and water-cooled chillers. In 2018, we completed replacing the second set of water-cooled chillers, and we installed variable-frequency drive (VFD) and variable flow control in the ice water system to improve energy efficiency. For process equipment, we installed variable-frequency drive (VFD) controllers on the pumps with lower operating frequency to reduce power consumption during standby.

Nuvoton Technology implemented a total of 7 energy conservation measures in 2018. By using the before and after difference and multiplying it to the estimated running hours, an estimated 1.61 million kWh were saved in electricity consumption

2018 Energy Conservation Measures

- Replacing water-cooled chillers to improve efficiency
- Installed variable-frequency drives (VFD) on the washing water circulation motors in the washing towers
- Added variable-frequency drive (VFD) control to the ice water system
- Continue to replace lights with LED lights
- Process cooling water connection valve optimization adjustment
- Production operation server integration
- Furnace process motor operation improvement

Note: Energy conservation is estimated by assuming that the energy saving measures continue for 12 months.

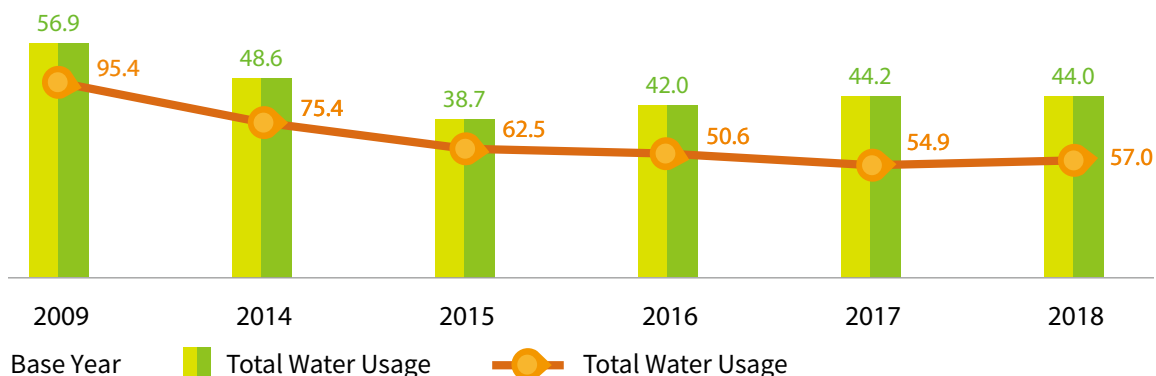
Water Conservation

Precipitation patterns have changed drastically in recent years due to climate change. Thus, the issue of water scarcity has begun to receive international attention. The manufacturing processes in the semiconductor industry require a lot of water. Nuvoton uses the tap water provided by a water company. Furthermore, Nuvoton also recycles a small amount of rain and air conditioning condensate to use as a secondary water source. Our two main water conservation strategies are to prioritize source reduction and increase back-end recycling utilization to reduce the consumption of water resources.

We have optimized the process water flow rate, adjusted the frequency of water changes, extended the backwash frequency of the water purification system, installed water conservation facilities for domestic water supply, and adjusted the gardening irrigation frequency to reduce water consumption. We gather and utilize various facilities to process wastewater in accordance with water quality classifications. We recycle water with high degrees of purity, optimally processing and recycling the water for process use. In addition, we have also set up an air conditioning condensate and rainwater collection and recycling system for secondary water usage.

• Tap Water Usage

Nuvoton's total tap water usage in 2018 was approximately 440,000 metric tons. Water usage per unit of product was approximately 57.0 liters/layer- wafer mask.



• Water Recovery Rate and Total Amount

Nuvoton's plant is an old plant built before 1994. Our total plant's water recovery rate is much higher than the "Hsinchu Science and Industrial Park's Construction Time Corresponding Recovery Rate Standard". Although we have encountered difficulties such as modifying the pipelines in our old plant and having no space to set up a recycling facility, we still continue to make efforts towards improvement.

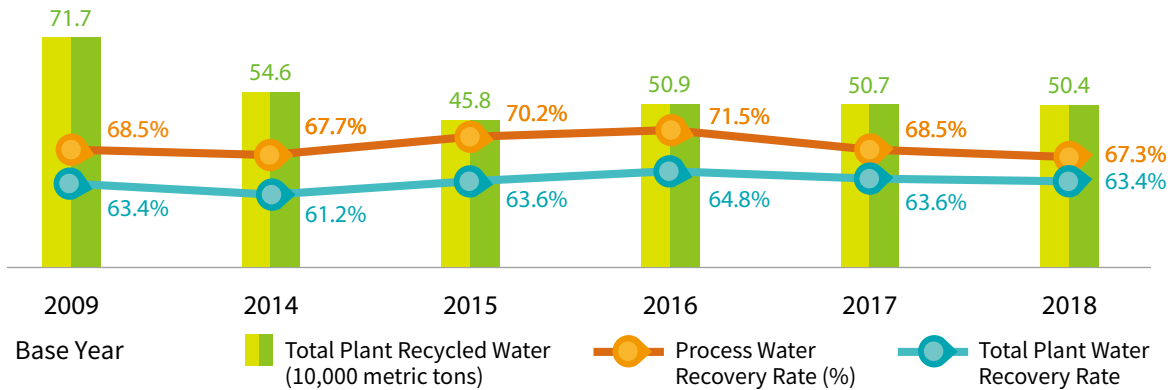
Nuvoton's 2018 Water Recovery Rate

	2018	Recovery Rate Standard
Process Water Recovery Rate	67.3%	>50%
Total Plant Water Recovery Rate	63.4%	>30%

Note 1: The water recovery rate standard is in accordance with the "plants built before 1994" standard as stipulated in the "Hsinchu Science and Industrial Park's Construction Time Corresponding Recovery Rate Standard".

① Water Recovery Rate and Total Amount

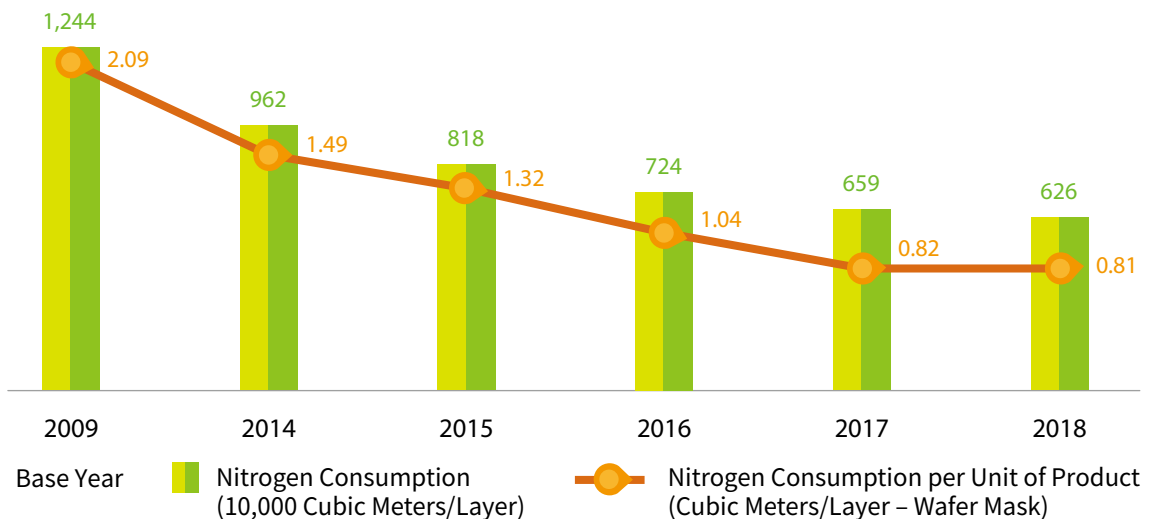
Nuvoton's recycled process water in 2018 was 424,000 metric tons, and the process water rate was 67.3%; the total plant recycled water was 504,000 metric tons, and the total plant water recovery rate was 63.4%.



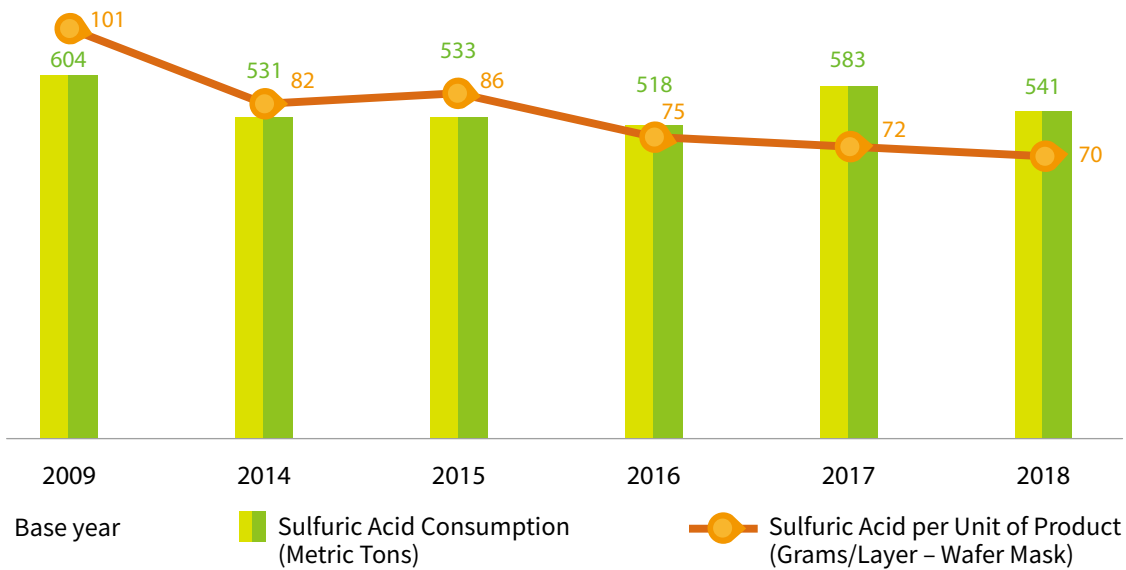
Other Key Chemical Raw Materials

According to Nuvoton's 2009 carbon footprint inventory results, we discovered that supplier usage of nitrogen and sulfuric acid have significant impact on the carbon emissions during the overall product life cycles. This part belongs to scope three - indirect emissions. We list these two chemical raw materials as the main targets for long-term monitoring and mitigation, and set 2009 as the base year to actively promote reduction. The successful results of our efforts can be seen when compared to the base year. The nitrogen consumption per unit of product in 2018 amounted to 0.81 cubic meters/layer - wafer mask; the amount has decreased by 61.1% compared to the base year 2009. The sulfuric acid consumption per unit of product in 2018 amounted to 70.1 gram/layer - wafer mask; the amount has decreased by 37.2% compared to the base year 2009.

① Nitrogen Consumption



② Sulfuric Acid Consumption



Pollution Prevention

2018 Waste Water and Waste Management Policies

Importance	<ul style="list-style-type: none"> Environmental pollution issues are no longer confined to specific locales due to the spreading of pollutants through the atmosphere, water, and the importing/exporting of goods. Therefore, major global environmental issues including acid rain, ozone depletion, global warming, air pollution, water/marine pollution, and transboundary movement of hazardous wastes now either directly or indirectly impact all countries. There are currently over 100 different international environment related conventions, some of which utilize measures such as trade sanctions, demonstrating the dire need for environmental protection. Pollution prevention has become one of the most important requirements during production processes.
Policies/ Commitments	<ul style="list-style-type: none"> Compliance with relevant government and international regulations and committing to the continuous reduction of pollutant emissions.
Goals	<ul style="list-style-type: none"> Reduce emissions of major pollutants and reduce the environmental impact of emissions.
Promotion Priorities and Practices	<ul style="list-style-type: none"> Starting from optimization of production processes and the reduction of material required to reduce the production of pollutants; Fumes and waste water are discharged only after processing by pollution prevention and control facilities in adherence to regulation standards; Waste material is preferentially treated and reused to reduce environmental impact; Stringent management of air pollutants released, recovery and reuse of wastewater, recycling of waste material and reduction of waste allow for the continuous development of environment friendly processes.
Performance Results	<ul style="list-style-type: none"> In 2018, a part of hydrofluoric acid waste liquid in our plant was processed by our factory wastewater treatment plant and then reused by other vendors. This promotes the normal circulation of materials in the economic circle and ecology, and increases the waste recycling rate. In 2018, we promoted the source reduction of photoresist strippers in incineration. Waste incineration amounted to 182 tons, reduced by 19 tons compared to 2017, while incineration rate decreased by 4%

Environmental Law Compliance and Grievance Channels

Nuvoton has no records of penalties or other dispositions for violating environmental laws and regulations nor had any instances of oil/fuel/waste/chemical material leakage in 2018. We stringently practice and comply with environmental laws and regulations. Every six months, we conduct a regular review of the relevant laws and regulations to confirm that the company complies with the existing laws. In response to the frequent changes in the Taiwan's environmental laws and regulations, we regularly collect new or revised environmental regulations each month for assessment. This is to avoid accidental noncompliance due to changes in laws.

A contact email is located in the CSR area on Nuvoton's website. Stakeholders interested in our environmental issues can email or call us to provide comments or file complaints on environmental related issues. There have been no grievance cases in 2018.

Air Pollution Control

Air pollutants generated during Nuvoton's production processes include volatile organic compounds (VOCS), nitrogen oxides, sulfur oxides, ammonia, chlorine, hydrochloric acid, nitric acid, and phosphoric acids. Our air pollution treatment strategy is comprised of source control, utilizing optimized process dosage to reduce the generation of air pollutants. Parts of generated exhaust streams are processed using a local scrubber system for first stage high concentration effective treatment, then according to the exhaust gas classifications, sealed and collected for processing in a central scrubber system for second stage terminal treatment. In addition to stringent monitoring within the factory, certified 3rd party laboratories are also commissioned for further testing annually, all test results are reported to competent authorities. Items tested include non-methane hydrocarbons (NMHC), acid and alkali gases including sulfuric acid (H₂SO₄), hydrochloric acid (HCl), nitric acid (HNO₃), hydrofluoric acid (HF), phosphoric acid (H₃PO₄), chlorine (Cl₂), ammonia (NH₃), and etc. The pollutant concentration levels found during past annual tests for exhaust produced by Nuvoton have all been vastly lower than those prescribed by emission standards.

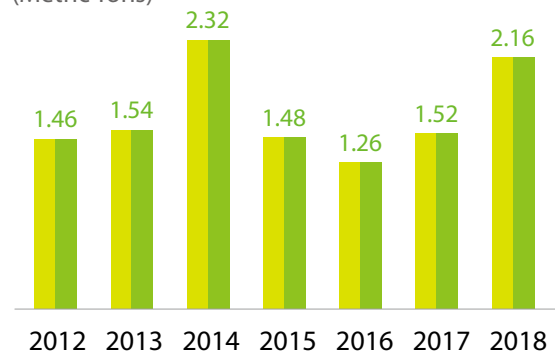
Nuvoton's air pollutant treatment system operates 24 hours a day, 365 days a year. System monitoring and processing are conducted continuously to maintain normal operation. Exhaust gases are processed separately in accordance to their characteristics:

- The flammable, poisonous and FCs gasses are specially treated on the processing equipment end through scrubbing systems, absorption, electrothermal methods, or on-site washing facilities to reduce hazards. Exhaust gasses are then discharged to the central waste washing tower for

processing further processing according to their PH levels.

- Exhaust gas containing volatile organic compounds are first absorbed using disk-type rotor s before being discharged to incinerators. High-boiling point organic waste gas are condensed, collected, and processed through temperature difference. Tested every year, the emission per year are all less than 0.6 kg/hr. The total emissions of volatile organic compounds continuously monitored in 2018 amounted to 2.16 metric tons.

Total Emissions of Volatile Organic Gasses (Metric Tons)



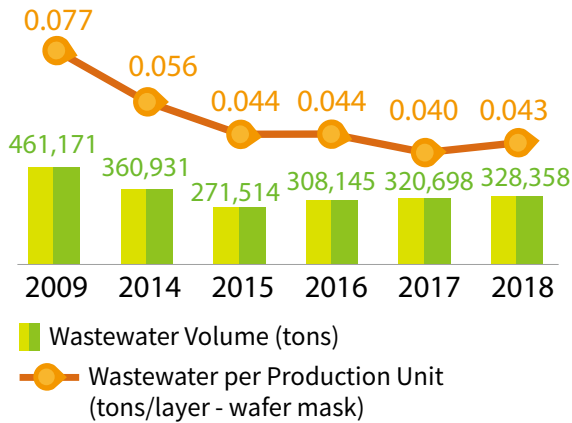
In addition, NO_x and SO_x emissions are estimated in accordance with the Environmental Protection Administration's emissions coefficient. Nuvoton's NO_x and SO_x emissions in 2018 amounted to 3.408 and 1.598 metric tons, respectively.



Water Pollution Control

The wastewater produced by Nuvoton is primarily comprised of process and domestic wastewater. Wastewater produced by Nuvoton is primarily from production processes and domestic use. The source for process water can be mainly categorized as cleansing, film forming, etching, contrasted, and diffused. Wastewater is processed according to its characteristics. Wastewater is first neutralized, and calcium chloride is added to fluoride-containing wastewater before undergoing coagulation and sedimentation processes, and then discharged to Hsinchu Science and Industrial Park's sewage treatment plant for processing. Then, through specialized pipes, it is discharged into Keya Creek. Domestic wastewater is discharged directly through the sewers to Hsinchu Science Park's sewage treatment plant.

The total wastewater of the entire foundry in 2018 was 328,358 tons. Discharged water quality meets the requirements of the "Discharged Water Quality Standards in Hsinchu Science and Industrial Park Sewerage". In 2018, waste water generated per production unit was 0.043(M3)/layer - wafer mask.



Two water quality tests are performed every year according to the "Water Pollution Control Measures and Test Reporting Management Regulations". The tests are conducted in the first half of the year and second half of the year, respectively. The results of the tests in 2018 were in line with water quality standards for Hsinchu Science Park.

Test Item	Management Standard	First Half of the Year Test Result	Second Half of the Year Test Result
Temperature	35	25.9	26.9
pH	5~9	6.5	6.5
Suspended particles(mg/L)	300	22.2	8.8
COD (mg/L)	500	31.6	99.7
Flourine Salt (mg/L)	15	7.1	3.8
Ammonia Nitrogen(mg/L)	50	16.5	9.8
Nitrate Nitrogen(mg/L)	50	6.0	1.8
Anion Interface Active Agent (mg/L)	10	0.04	0.04
Copper(mg/L)	1	ND	0.049
Zinc(mg/L)	5	0.025	0.013
Boron(mg/L)	1	0.240	0.129

Note 1: Note: Levels of "cadmium, chromium, lead, nickel, mercury, hexavalent chromium, cyanide and arsenic" were lower than the minimum detection limits of detection methods used, application for exemption from testing for these items was approved by the Hsinchu Bureau of Environmental Protection in 2008.

Note 2: ND is less than the laboratory's detection limit of 0.005 (mg / L).

The Discharged Water Quality Standards in Hsinchu Science and Industrial Park Sewerage implemented the third phase of ammonia nitrogen emission standards in 2017. The third phase of changes reduced the regulatory limit for ammonia nitrogen emission from 75mg/L to 50mg/L. Therefore, ammonia nitrogen monitoring equipment was added for the monitoring and control of ammonia nitrogen levels in discharge water. Utilizing newly added equipment, we developed an optimized process for reduction management measures to meet the improved standards described above.



Waste Management

Nuvoton's waste management strategy is to implement source classification and reduction, and reduce the amount of waste generated per unit of product as well as strengthen the recycling of waste. Our disposal method prioritizes reuse treatment to reduce the high environmental impact caused by incineration and landfilling, achieving the maximum benefits of waste recycling and sustainability.

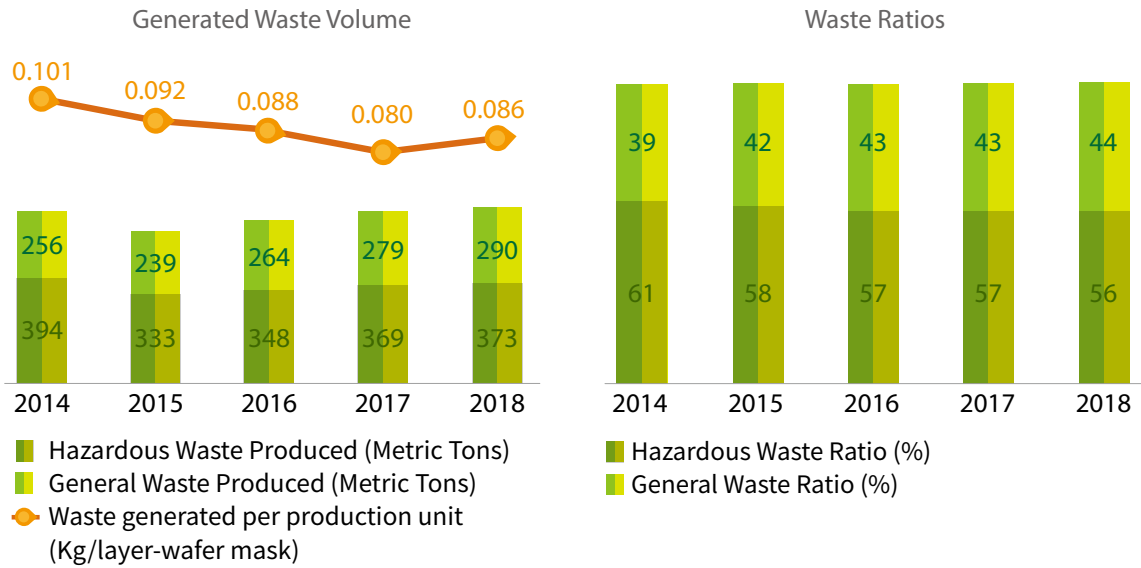
In-plant audits are carried out in accordance with our autonomous management mechanism to ensure waste management within the plant. This allows for complete and comprehensive management of production sources and on-site processes. These measures have further helped to improve production processes resulting in cleaner production and waste reduction as well as ensuring regulatory compliance. We carefully select and outsource qualified waste removal and reuse to partner vendors to properly dispose of the waste. In addition, we supervise the vendor waste removal, and environmental impact assessments are performed annually to evaluate environmental impact risk levels. The vendors' risk probability levels are evaluated in accordance with their scores. Depending on the severity and possibility risk matrix, the vendors are assigned a different audit frequency of 1~3 years. We then formulate an annual waste audit plan to audit the removal services providers' on-site operations, treatment plants' processing and storage, documentation checks, and other such items. Then, we immediately track GPS data to ensure proper waste disposal and to fulfill the responsibility of waste production. In 2018, a total of 15 audits were conducted on removal services providers and waste management treatment plants to confirm legal compliance. There were no vendors that

have been suspended of cooperation due to violations of laws or related regulations.

		Risk Level			
		1	2	3	4
Severity Level	1	3 Years	2Years	1Years	1Years
	2	2Years	1Years	1Years	1Years
	3	1Years	1Years	1Years	Half Year
	4	1Years	1Years	Half Year	Quarterly

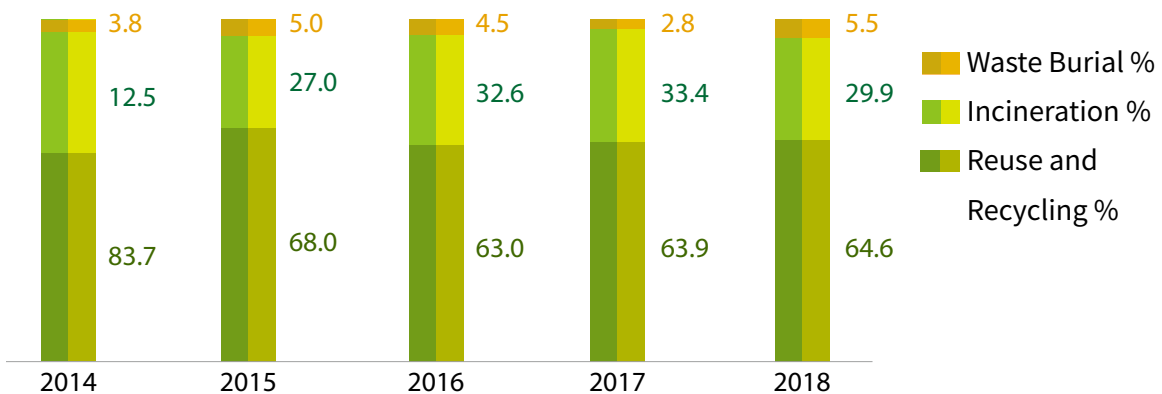
● Production of Waste

The waste generated by Nuvoton can be divided into general business waste (includes recycled waste and domestic waste generated by offices) and hazardous business waste. In 2018, total corporate waste amounted to approximately 663 metric tons, of which general waste accounted for approximately 290 metric tons (44%) and hazardous waste accounted for approximately 373 metric tons (56%); waste generated per unit of product amounted to 0.086 kilograms/layer – wafer mask. The amount of waste generated per unit of product in 2018 decreased by 6.7% from 2017. This is mainly due to the fact that hydrofluoric acid waste liquid that was previously treated by the wastewater treatment plant is now being reused by a recycling manufacturer, coinciding with this year's batch production of waste in the pure water system's ion exchange resin replacement cycle.



Waste Disposal Methods Statistics

Nuvoton's waste treatment prioritizes reuse. The following table shows the types and applications of reuse. Waste that currently cannot be reused are incinerated and buried. In 2018, 64.6% of waste produced by Nuvoton was reused (recycled waste included), 29.9% of waste was incinerated, and 5.5% was buried. Incineration usage increased by 20% from 2014 to 2017. This was mainly due to radical changes in the photoresist stripper market, after these changes, no suitable vendors were available for the recycling and reuse of affected materials, causing an increased reliance on incineration methods. We started promoting the source reduction of photoresist strippers in 2018, improving equipment and optimizing operating conditions to reduce the output of photoresist to waste liquid. In 2018, we promoted the source reduction of photoresist strippers in incineration. Waste incineration amounted to 182 tons, reduced by 19 tons compared to 2017, while incineration rate decreased by 4%. In addition, the hydrofluoric acid waste liquid that was previously treated by the wastewater treatment plant is now being reused by a recycling manufacturer to promote the normal circulation of substances in the economy or ecology, increasing the recycling rate of waste.



Nuvoton's Waste Reuse / Recycling Treatment Description

Waste Type	Waste Reuse / Recycling Treatment Description
Waste Sulfuric Acid	Vendor recycles and dilutes into industrial-grade sulfuric acid
Waste Hydrofluoric Acid	Vendors recycle processed industrial sodium fluorocarbonate raw materials
Waste Isopropanol	Vendors recycle and distil into industrial-grade isopropanol
Waste NMP	NMP Vendors recycle and distil into industrial-grade NMP
Lubricating Oil	Recycled by vendor and distilled to produce secondary lubricants
Emptied Chemical Waste Barrels	Emptied chemical waste barrels are either washed and reused, or crushed and made into plastic or glass materials
Waste Photomasks	After the vendor removes all patterns, waste photomasks are either made into new ones or optical materials
Waste Lead-Acid Batteries	Vendor retrieves for processing, lead blocks, plastic, etc. are recycled after processing
Waste Mixed Metal Scraps	Vendor processes the scraps, and recycles the metal
Fluorescent Lights	Vendor processes the lights, then recycles any metals, non-metals, glass, etc
Waste Mercury	Vendor uses distillation equipment to process and reuse the mercury
Recycling Waster	Waste paper, glass, aluminum scraps, styrofoam scraps, aluminum foil bags, plastic bottles, plastic waste, etc. are reused by recycling vendors

Waste Disposal Method Amount/Rate

Waste Category	Disposal Method	2014		2015		2016		2017		2018	
		Total Amount	Ratio	Total Amount	Ratio	Total Amount	Ratio	Total Amount	Ratio	Total Amount	Ratio
General Waste	Incineration	81	13	148	26	182	30	201	31	182	27
	Waste Burial	25	4	29	5	27	4	17	3	35	5
	Reuse and Recycle	150	23	62	11	54	9	61	9	74	11
Hazardous Waste	Incineration	0	0	6	1	17	3	15	2	17	3
	Solidified then Processed	0	0	0	0	0	0	1	0	1	0
	Reused	394	60	327	57	332	54	353	55	354	54

Unit: Tons; Ratio: %

Greenhouse Gas Management

2018 Greenhouse Gas Management Policy

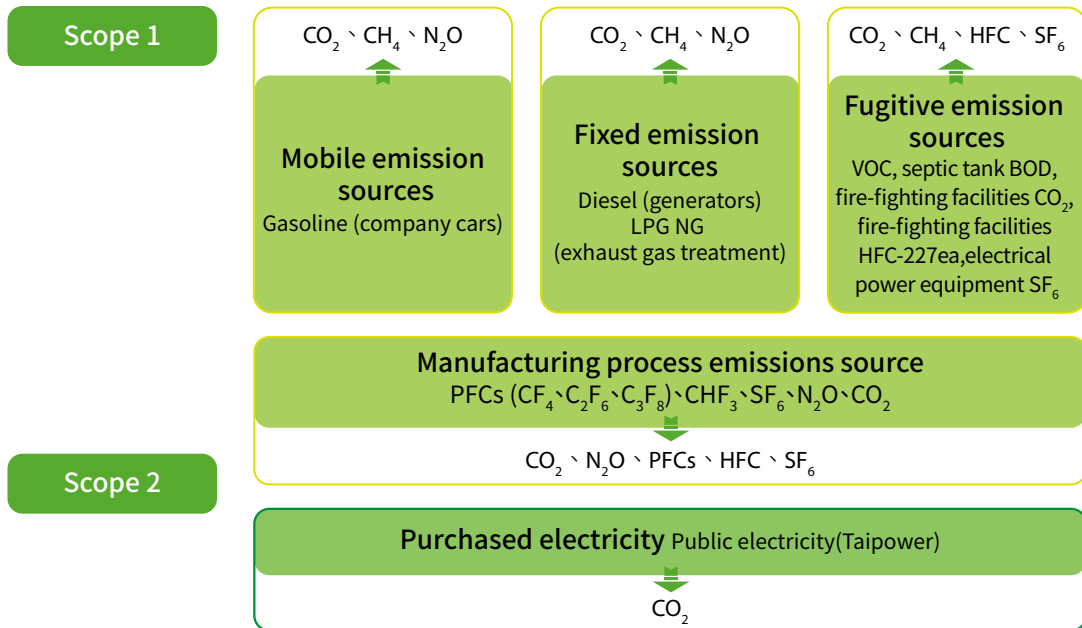
Importance	<ul style="list-style-type: none"> In response to global climate change concerns and international carbon cutting trends, a "Greenhouse Gas Reduction and Management Act" was announced domestically in 2015 to meet client concerns and increase competitiveness by reducing the emission of greenhouse gases.
Policies/ Commitments	<ul style="list-style-type: none"> Commitment to continuous improvement and reduction of greenhouse gas emissions during production processes.
Goals	<ul style="list-style-type: none"> Greenhouse emissions generated per production unit (kilograms carbon dioxide equivalent /square centimeters - wafer mask) in 2030 decreased by 30% in comparison to 2009.
Promotion Priorities and Practices	<ul style="list-style-type: none"> Establish greenhouse gas emission inventory policies, focus on the reduction of major emission sources such as fuel, S₆ and FCs.
Promotion Priorities and Practices	<ul style="list-style-type: none"> In 2018, greenhouse gas emissions generated per production unit was 0.875 kilograms carbon dioxide equivalent/ square centimeters - wafer mask, a 7% decrease from 2017, and a 30% decrease from the base year of 2009.

Due to the rise in surface temperatures, climate change has directly affected the manufacturing and operation of the manufacturing industry in recent years, causing flooding, water interruption, power supply shortage, increased raw material costs, and other such problems. The Paris Climate Conference (COP21) was held in 2015 to reduce greenhouse gas emissions, mitigate climate change, and improve the adaptability to climate change. Thus, reducing greenhouse gas emissions is an important issue for the sustainable development of enterprises. Through greenhouse gas inventory, Nuvoton examines the main sources of greenhouse gas emissions to actively implement mitigation and adaptation actions. Nuvoton's greenhouse gas management strategy consists of first conducting greenhouse gas inventory and registration in accordance with the Environmental Protection Administration's regulations. Then, through inventory checks to understand the main sources of emissions, Nuvoton actively takes relevant mitigation and adaptation actions.

Greenhouse Gas Inventory

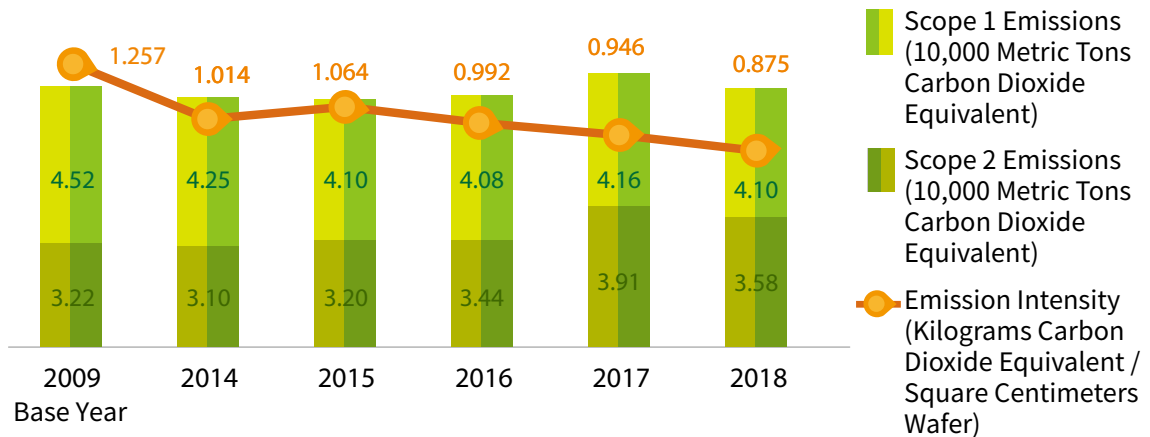
In order to grasp the status of the company's greenhouse gas-related activities and develop reduction targets and priorities, in 2009 Nuvoton established a greenhouse gas inventory mechanism in accordance with ISO14064-1 and the Environmental Protection Administration's Greenhouse Gas Emissions Inspection and Registration Guidelines. Nuvoton conducts annual inventory of greenhouse gas emissions in the plant area, setting 2009 as the base year for greenhouse gas emissions. The content of the examination includes Scope 1 – "Direct greenhouse gas emissions"; Scope 2 – "Indirect greenhouse gas emissions from energy use", which does not include Scope 3 – "Indirect greenhouse gas emissions". Since 2009, the data from Nuvoton's greenhouse gas inventories have always passed inspections and obtained verification statements by third-party verification agencies based on ISO14064-1 standards

Greenhouse Gas Emission Categories



Greenhouse Gas Emissions Inventory Results

Since 2009, Nuvoton’s greenhouse gas emissions inventory results have been checked by DNV GL Business Assurance. In 2018, the inventory results for greenhouse gas emissions was 76,818 tons, while greenhouse gas emissions per unit of product was 0.85 kilograms carbon dioxide equivalent/square centimeters - wafer mask, a decrease of 7% from 2017 and a decrease of 30% from the base year 2009.



Note: 2018 Energy coefficients calculated from 2016 coefficients

Greenhouse Gas Reduction

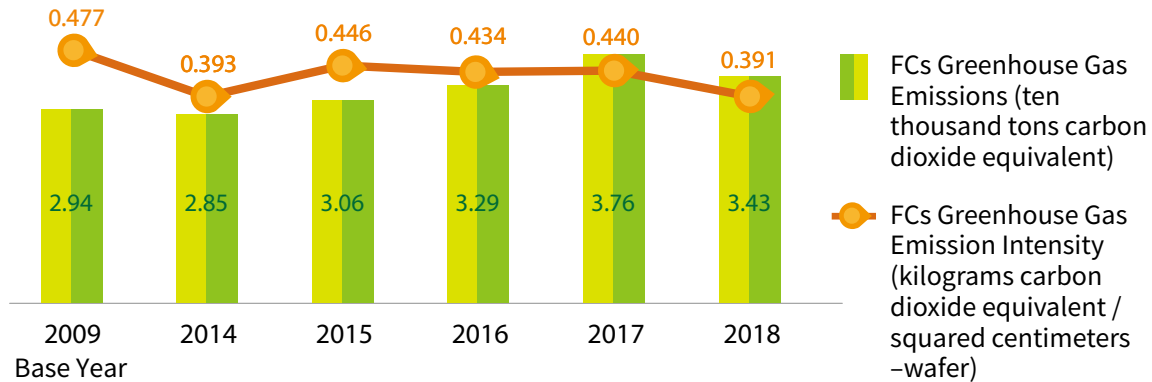
The results of the inventory reveal that the majority of emissions are generated from electrical consumption, followed by the FCs fluorinated greenhouse gasses used in the manufacturing process, such as tetrafluoromethane (CF_4), hexafluoroethane

(C_2F_6), sulfur hexafluoride (SF_6), fluoroform (CHF_3), octafluoropropane (C_3F_8), and octafluorocyclobutane (C_4F_8). These two items account for more than 90% of our total emissions. Nuvoton’s greenhouse gas reduction measures include setting annual energy efficiency targets to enhance electricity efficiency and reduce carbon emissions, as well as conceiving clean

manufacturing for specific production. Electricity reduction measures have been described in section 6.2.1 above. Greenhouse gas emissions was reduced by approximately 892 tons of carbon dioxide equivalent. To reduce the FCs used in manufacturing, we mainly utilized gas replacements in the beginning. We use the greenhouse gas, C_3F_8 , which has a lower Global Warming Potential (GWP), to replace CF_4 and C_2F_6 used in thin film processing, and SF_6 which is used in wafer backside etchings to reduce the equivalent carbon dioxide emissions of FCs. For 2018, our primary reduction strategy was adjusting the process parameters to reduce emissions. We planned to replace the C_3F_8 used in the thin film process with C_4F_8 , which has an ever lower greenhouse Global Warming Potential (GWP).

● Process FCs Carbon Dioxide Equivalent Emission and Intensity

According to the inventory results, the process-used FCs greenhouse gas emission intensity has shown a trend of increasing since 2015. The main reason for this is due to changes in product combinations and the development of new processes. Nuvoton strives to make adjustments and improvements from the manufacturing process according to the results of the inventory. In 2018, manufacturing related FCs greenhouse gas emissions amounted to the carbon dioxide equivalent of 34.3 thousand tons, and the emission intensity amounted to 0.391 kilograms/squared centimeters-wafer. Emission intensity has returned to the level of 2014, mainly due to the continuous improvement of process improvement and the change of product mix in 2018.



Green Products

2018 Green Product and Client Health and Safety Management Policy	
Importance	<ul style="list-style-type: none"> In response to international environmental friendly trends and client needs, Nuvoton is committed to designing low-toxicity, low-carbon, and low-energy green products, increasing global competitiveness by meeting client needs for environmentally friendly products.
Policies/ Commitments	<ul style="list-style-type: none"> Nuvoton strives to design, purchase, manufacture and sell products which do not contain harmful substances and are in compliance with international regulations to meet client needs. Nuvoton further believes in the fulfillment of their social and civic responsibility of environmental protection.
Goals	<ul style="list-style-type: none"> Products provided by Nuvoton are in 100% compliance with non-hazardous substances regulations and client requirements.

<p>Promotion Priorities and Practices</p>	<ul style="list-style-type: none"> • Nuvoton established the hazardous substances management system, QC 080000, in 2008. It utilizes a systematic approach in coordinating all internal and external green product-related matters to assist sales, purchasing, research and development, and manufacturing in the phases of design, production, and shipping, effectively monitoring the management processes of environmental product development. Furthermore, we comply with international regulations and customer requirements for environmental assessments and imports. We establish and implement green directives and requirements of customers, promote green product continuous improvement projects, control harmful substances, and conduct green product audits to ensure the effectiveness of Nuvoton's green policies.
<p>Performance and Results</p>	<ul style="list-style-type: none"> • None of Nuvoton's products were involved with any illegal or non-compliance matters in 2018, meeting international regulations and customer requirements.

Green Product Policies

In response to international environmental trends and customer needs, Nuvoton is committed to designing green products with low toxicity, low carbon, and low energy consumption, so as to enhance green competitiveness and grasp global business opportunities. These policies apply to all product-related activities of Nuvoton. From the company's internal design stage to external supplier sourcing and the manufacturing and transportation phases, Nuvoton promotes and implements the green concept to the overall value chain. Nuvoton conducts project planning, execution, inspection, and action in each phase using the PDCA management cycle to ensure that all phases meet policy specifications and goals. In addition, an important part of the policy is to make employees understand the importance of environmental protection. Through educational training and advocacy communication, we incorporate the green concept into our daily work.

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Nuvoton ensures that the products it designs, manufactures, and sells are able to meet or exceed the standards of international environmental regulations. Furthermore, Nuvoton requires upstream raw material suppliers and downstream packaging and testing firms to work together to reduce their various impacts on the environment and comply with the following international environmental regulations:

- The European Union's (EU) Restriction of Hazardous Substances Directive (RoHS 2.0, 2011/65/EU): Limits the amount of lead (<1,000ppm), cadmium (<100ppm), mercury (<1,000ppm), hexavalent chromium (<1,000ppm), polybrominated biphenyls (<1,000ppm), and polybrominated diphenyl ethers (<1,000ppm) in products. RoHS 2.0, COMMISSION DELEGATED DIRECTIVE (EU) 2015/863, DEHP <1,000ppm, BBP <1,000ppm, DBP <1,000ppm & DIBP <1,000ppm.
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- Halogen-free requirements for electronic products: In general, a halogen-free product by customer definitions means that the volumes of bromine and chlorine are each <900ppm, respectively, with total content <1,500ppm. All the products of Nuvoton comply with both requirements.
- EU's Registration, Evaluation, Authorization and Restriction of Chemicals (EU REACH): Regarding the hazardous substances and subsequent Substance of Very High Concern (SVHC) announced by EU Reach, all products of Nuvoton comply with the requirements of this regulation.
- Limits for perfluorooctane sulfonate (PFOS): Nuvoton prohibits the use of raw materials which contain PFOS in the manufacturing process.

In addition to current international laws and customer requirements, Nuvoton will also continue to focus on potential regulatory requirements for the future, and proceed with all appropriate preparations. None of Nuvoton's products were involved with any illegal or non-compliance matters in 2018, meeting international regulations and customer requirements.

Nuvoton's Hazardous Substances Management:

- **Declaring a Non-hazardous Substances Policy**
Nuvoton focuses on designing, purchasing, manufacturing, and selling products with no hazardous substances to comply with international regulations and meet the needs of customers. Nuvoton also strives to protect the environment to fulfill its social responsibility.
- **Creating a List of Controlled Hazardous Substances**
Nuvoton has created a list of controlled substances in accordance with international environmental regulations and customer needs, including banned substances, restricted substances, and declarable substances. The list is amended every year in accordance with current conditions.
- **New Material Assessment System**
Nuvoton has created a new material assessment system to confirm that newly developed products and materials are in line with Nuvoton's hazardous substance management procedures meets the needs of EHS.
- **Green Procurement and Supplier Management**
Raw material suppliers and contract manufacturers must sign a "Certification of Non-use of Hazardous Substances", and be inspected by a third party every year or as needed to ensure that their products meet international environmental requirements.
- **IECQ QC080000 Hazardous Substance Management System Certification**
Nuvoton received the hazardous material management standards IECQ QC080000 from the International Electrotechnical Commission (IEC), which was developed in accordance with its electronic components quality evaluation system. Built on the ISO 9001 and ISO / TS 16949 management systems, it utilizes a "process-oriented" approach to reduce or eliminate harmful substances contained in the organization's products. In addition, it systematically manages hazardous substances to reduce or avoid the production of harmful substances. At the same time, it meets RoHS, WEEE, and other special customer needs. A third-party audit is conducted on a regular basis every year to ensure the effective operation of the hazardous material management system.

- **SONY Green Partner Certification**
Nuvoton has been a SONY-certified green business partner since 2009. Nuvoton still continues to pass the regular verification to date.
- **Detection of Hazardous Substances**
In addition to managing factory materials and process raw materials through supplier sources, Nuvoton sample tests harmful substances in wafer and IC products every year. The tests are conducted by a fair third-party, measuring and monitoring raw materials and products that have an impact on the environment, as well as harmful and banned substances.



Company
Overview



Corporate
Governance



Customer Service and
Supplier Management



Environment-
Friendly



Best
Workplace



Philanthropy





06 Best Workplace

- Human Resources Structure
- Talent Management
- Salary and Benefits
- Learning and Developing
- A Lohas Work Culture
- Employee Welfare Committee
- Occupational Health and Safety
- Health Management Program



Best Workplace

2018 Talent Recruitment and Training Management Policy

Importance	<ul style="list-style-type: none"> Employees are the cornerstones of a company's development. Nuvoton places great importance in talent recruitment by having a comprehensive management system, providing competitive salaries and benefits as well as the best possible working environment to attract talented individuals. Nuvoton's comprehensive and diverse education and employee training system further allows employees to continue improving themselves after joining the company, which facilitates the sustainable development of the Company.
Policy/Commitment	<ul style="list-style-type: none"> For talent recruitment, Nuvoton fully complies with all relevant labor standards and regulations, as well as the Responsible Business Alliance (RBA) Code of Conduct for the recruitment of suitable talents into the Company. In regards to personnel training, Nuvoton recognizes the importance of employee learning and development, and makes available a large number of learning channels which utilize a diversity of learning methods as we strive to create a continuously improving learning culture.
Goal	<ul style="list-style-type: none"> Create an organization with a large amount of room for development as well as a friendly workplace environment to continue attracting talented individuals to Nuvoton.
Promote Key Points and Implementation Method	<ul style="list-style-type: none"> Encourage candidates to join Nuvoton by providing competitive salaries and benefits as well as a safe and comfortable working environment.
Performance and Results	<ul style="list-style-type: none"> 0 labor disputes; discrimination free, no forced labor complaint incidents A total of 9,296 employees participated in the completion of 12,035 hours of employee training.

Human Resources Structure

As of December 31, 2018, Nuvoton Technology had a total of 1,408 employees, comprised of 151 managerial, 864 professional, and 393 technical personnel. Amongst management personnel, there were 36 senior executives at the director

level or higher. At the end of 2018, 44% of our total workforce was comprised of female personnel. The male to female ratio among managerial and professional personnel is approximately 3:1, which is consistent with the fact that the students majoring in engineering fields relevant to this industry in Taiwan are still mostly male, with the aforementioned ratio illustrating this phenomenon.

Category	Division	Male		Female		Subtotals and Proportions by Division	
		No.	In Proportion to the Division	No.	In Proportion to the Division	No.	In Proportion to Total Number of Employees
Position	Management	133	88%	18	12%	151	11%
	Professional	633	73%	231	27%	864	61%
	Technical	24	6%	369	94%	393	28%
Total							1,408

Note: Subdivision managers and higher are considered management.

Regarding age distribution, Nuvoton Technology abides by the regulations of the “Labor Standards Act”, and does not hire individuals under the ages of 15. Furthermore, we also do not hire underage people between the ages of 15 and 16. Employees between the ages of 16 and 40 account for 52% of our total workforce. In terms of academic qualifications, more than 37% of employees have obtained a master’s

degree or higher. For managerial and professional personnel, this percentage rises to 52%. Concerning the types of Nuvoton employees, except for fixed term contractors, 99% of our workforce comprises staff and operators who are full-time employees. In order to establish a direct communication channel with our employees, Nuvoton holds regular labor-management meetings on a quarterly basis. Four labor-management meetings in total were held in 2018.

Category	Age		Male		Female		Subtotal by Division and Proportion	
			No	In Proportion to the Division	No	In Proportion to the Division	No	In Proportion to all Employees
Age	21~30		164	57%	124	43%	288	21%
	31~40		280	63%	162	37%	442	31%
	41~50		248	51%	242	49%	490	35%
	51~60		98	52%	90	48%	188	13%
	60		0	0%	0	0%	0	0%
Education	PhD		17	100%	0	0%	17	1%
	Master's		440	86%	69	14%	509	36%
	Bachelor's		263	62%	158	38%	421	30%
	Vocational School		56	36%	99	64%	155	11%
	Senior High School		13	4%	280	96%	293	21%
	Below Senior High School		1	8%	12	92%	13	1%
Employment Type	Full-Time Employees	Staff	759	75%	248	25%	1007	71%
		Operators	24	6%	369	94%	393	28%
	Part-time and Temporary Employees	Fixed-term Contract	7	88%	1	12%	8	1%

Note: 10 members on the auditing committee were not included in the above.

Talent Employment Practices

Nuvoton Technology has always regarded employees as our most important asset, and strives to attract new applicants by providing competitive compensation and benefits, comprehensive education and training, and a comfortable and safe working environment. Nuvoton is in full compliance with the rules of the Labor Standards Act, and abides by the labor rights provisions of the EICC Code of Conduct. When hiring new employees, it does not employ people under the age of 15 or involuntary workers (such as those by coercion, mortgage, debt, indentured servitude, enslavement or human trafficking). Nuvoton further ensures that all employees enjoy equal rights without discrimination, and that the Company shall not

unlawfully discriminate against any employees or prospective employees for reasons such as ethnicity or nationality, skin color, age, sex, sexual orientation, gender identity, disability, pregnancy, religion, political stance, corporate background, veteran status, protected genetic information, or marital status. In 2018, no discrimination or forced labor complaints were filed against Nuvoton Technology Corporation. New employee recruitment and hiring rates in 2018 differ only slightly from 2017, with a total change of less than 2%. The majority of newly recruited employees are between the ages of 21 and 40. The ages of those leaving the company also generally follows a normal bell shaped distribution. Overall, Nuvoton's employee structure remains quite stable.

2018 Turnover and hiring rates by age group

Age Group ¹	2018							
	No. of New Employees ²		In Proportion to the Total No. of Employees ³		Turnover ²		In Proportion to the Total No. of Employees ³	
	Male	Female	Male	Female	Male	Female	Male	Female
18~20	1	2	0.1%	0.1%	1	1	0.1%	0.1%
21~30	55	37	3.9%	2.6%	24	24	1.7%	1.7%
31~40	19	13	1.3%	0.9%	23	15	1.6%	1.1%
41~50	8	1	0.6%	0.1%	16	7	1.1%	0.5%
51~60	2	2	0.1%	0.1%	6	11	0.4%	0.8%
61~			0.0%	0.0%	1		0.1%	0.0%
Sub-total	85	55	6.0%	3.9%	71	58	5.0%	4.1%

Note 1. Age: Age of employee on first day / last day of employment

Note 2. Number of new employees includes first-time employees, and does not include returning or reinstated employees / Turnover includes only the number of resignations and retirements, and does not include dismissals or jobs placed on hold

Note 3. Total number of company employees as described in the above table is based on numbers on retrieved on the day of December 31, 2018

Salary and Benefits

Nuvoton Technology employee salaries are in compliance to the minimum wage rules of the Labor Standards Act, and the salaries of the lowest paid direct employees are at least 1.2 times higher than the minimum stipulated by the Labor Standards Act. In order to provide employees with a workplace in which they can develop both mentally and physically in a balanced manner, we implemented a pre-planned vacation management system to assist employees in planning their vacations. And we also actively remind employees to take adequate vacation time as to promote the concept of healthy work environment. In terms of benefits, Nuvoton provides insurance and pension benefits that are in compliance with local laws and regulations across the globe. Nuvoton further provides group insurance benefits that are above and beyond the requirements of the law to ensure the work and life safety of its employees. To encourage marriage and birth rates, we provide designated

expectant mother priority parking spaces, lactation rooms, maternity gift packets, maternity leave, paternity leave, family care leave, marriage leave, and a cash gift from the employee welfare committee for each birth.

We further abide by the “Gender Equality in Employment Act”, which gives male and female employees the right to apply for maternity and paternity leave. In 2018, 18 female employees applied for maternity leave, and 80% returned after the end of their leave period; and 21 male employees applied for paternity leave, and 100% returned after the end of their leave period. The aforementioned female employees who did not return directly to Nuvoton after their maternity leaves applied for unpaid maternity leave under the "Act of Gender Equality in Employment", with nearly 87% returning after their maternity leave. Furthermore, 100% of employees who began their maternity or paternity leave during the previous year returned to work this year.

Maternity/Paternity Leave Statistics for Nuvoton Employees

Year	No. of Female Employees	No. of Male Employees	No. of Employees taking Maternity Leave	No. of Employees taking Paternity Leave	No. of Employees Qualifying for Parental Leave
2014	594	679	27	42	237
2015	601	712	27	51	221
2016	613	754	16	29	192
2017	616	775	19	44	186
2018	618	790	18	21	147

Note 1: Year of the first day of maternal/paternal leave was used to decide year of each paternal/maternal leave.

Note 2: The number of employees qualifying for maternal/paternal leave was determined by adding the number of qualifying employees during the current year to the number of qualifying employees in the two preceding years, ie. the number of qualifying employees in 2018 is equivalent to the total of qualifying employees between 2016 to 2018.

Nuvoton Post-Maternity / Post- Paternity Leave Employee Retention Rates

Year	Employees Returning After Maternity Leave		Employees Returning After Paternity Leave		Resigned Within 1 Year of Maternity Leave		Resigned Within 1 Year of Paternity Leave	
	No.	%	No.	%	No.	%	No.	%
2014	23	85%	42	100%	5	19%	9	21%
2015	24	89%	51	100%	1	4%	7	14%
2016	15	94%	29	100%	0	0%	4	14%
2017	15	79%	44	100%	0	0%	4	9%
2018	14	78%	21	100%	1	6%	1	5%

Note 1: The number of employees who return to work after parental leave does not include those who apply for parental leave within one week of finishing parental leave.

Note 2: The number of employees leaving within one year of parental leave includes those that remain on extended parental leave as well as those transferring within the Company upon their return.

Note 3: The percentage of those returning after parental leave = number retained / total number of people that took parental leave

The percentage of employees that leave the company within a year after their parental leave = number of employees that resign (excluding those taking extended leave) / total number of employees taking parental leave.

Nuvoton Post-Parental Leave Job Return Rate

Year	No. of Employees Applied for Parental Leave		No. of Employees Forecast to Return During Current Year		No. of Employees Returning to Work After Parental Leave			No. of Employees Retained After 1 Year of Returning From Parental Leave		
	Male	Female	Male	Female	Male	Female	Reinstatement Rate	Male	Female	Retention
2013	2	8	2	12	1	10	79%	0	5	83%
2014	2	15	1	11	0	7	58%	1	9	91%
2015	1	13	1	12	1	8	69%	0	6	86%
2016	0	13	0	11	0	11	100%	0	7	78%
2017	3	13	2	17	1	14	79%	0	11	100%
2018	0	7	2	13	1	12	87%	1	14	100%

Note: Reinstatement rate = number of people returning to work after parental leave in current year / number of people expected to return to work in current year

Retention rate = number of people that remain an employee 1 year after taking parental leave / number of people taking parental leave in the previous year

Comprehensive Retirement Policy

To ensure the quality of life after retirement of our employees to enhance their service spirit, Nuvoton Technology has formulated an Employee Retirement Management Plan in accordance with the Labor Standards Act. The Plan clarifies retirement conditions, payment standards, application procedures and other matters, as well as setting up an employee retirement fund supervision committee according to law. According to Article 56, Provision 1 of the Labor Standards Act, Nuvoton shall on a monthly basis allocate funds to an employee retirement fund at the Bank of Taiwan. Ant according to Provision 2 of the same Act and Article, the company shall estimate the number of employees expected to meet retirement conditions by the fourth quarter of each year, asses the current balance of the retirement fund, and make up the difference required to fund the retirement payments. In addition, all employees applicable to the Labor Pension Act are required to make payments of 6% of their monthly salary to their individual Bureau of Labor Insurance pension fund account in accordance with regulations. Currently 12.8% of employees have opted to take part in the previous retirement policy whereas 87.3% of employees have instead opted for the new retirement policy.

Learning and Development

NNuvoton Technology values the learning and development of each employee, and the continual improvement of employees' abilities is the driving force behind the growth of the company. As we are in a highly competitive industrial environment, nurturing talented people is the key to strengthening our core competitiveness. We offer a wide range of learning channels and diversified learning styles, focusing on rich and practical learning content, integrating internal and external learning and development resources, and encouraging active learning and the sharing of skills and knowledge, in order to provide employees with a complete, continuous, diverse and broad-based learning environment and development platform. We are dedicated to creating a passionate learning culture in our company.

A Wide Range of Learning Channels

Nuvoton Technology offers a variety of learning channels and diverse ways of development to meet the various learning and growth needs of employees at all levels, including: course learning (internal and external training courses / practical experience sharing seminars / high-level short-term local and overseas courses / online learning), practical learning (on-the-job training, task or project assignment, work rotation, short-term experience), and learning from others (work instruction, peer learning).



Course Learning - Classroom Learning

Using managers as an example, a multistep management improvement program is provided according to different manager levels and functions. For lower and middle level managers, we provide customized competency development training. We will first determine the current capability of the lower or middle level manager with a management competency examination, and then make an appropriate development plan accordingly, that includes management training, management case study competitions, active applied learning, and training seminars. Specifically for high-level managers, lectures are held on a topic-specific basis to share practical experience or discuss industrial and economic trends. This can allow them to understand the latest industry developments and learn from external benchmarked enterprises and talent, in order to absorb new knowledge, expand their horizons, and establish a network of professionals in the field. Nuvoton places great emphasis on leadership development, focusing on in-depth learning and practical application, and supplemented by the support and observation of the learning process by senior executives and supervisors, to enhance students' commitment to their learning. In addition to focusing on learning needs, an emphasis is also placed on post-study application and follow up, to assist managers in gaining the skills and competencies required of their position.

Courses - Online Learning

In 2013, Nuvoton Technology launched its Cloud Learning platform to provide employees with a diverse and convenient learning environment. The platform includes: an Innovation Academy, Cloud Academy, LOHAS College, Green Technology Academy and other various types of learning content. Establishing this platform has increased the resources and channels available to employees for online learning, and ensuring education is no longer subject to time and space constraints. The company can also integrate all training

data from the platform to facilitate training management and record tracking. Employees can choose courses according to their business needs or their own interests. Nuvoton Technology expects its employees to maintain a passionate attitude and a commitment to lifelong learning, in order to continuously improve their job skills. As of the end of 2018, the Nuvoton Cloud Learning platform offers a total of 1,873 online courses, featuring different categories that cover new employee training, communication, management, and professional skills, and language learning.



On-The-Job Training & Mutual Learning

We also emphasize that learning should be linked to practical application, in order to apply what we have learned to our job. In addition to classroom learning, an effective learning method is through on-the-job-training (learning through doing), by being provided with a contextual experience, and by following the guidance of a supervisor or expert to speed up the learning effect. Therefore, we arrange for employees to have an opportunity to be guided by experienced experts and supervisors in their field, as well as encouraging participation in cross-departmental projects or organizational assignments, and to accept work rotation or interaction with peers in other fields. This allows knowledge and skills within the organization to quickly be shared, wisdom to be continuously accumulated, and fosters practically beneficial talent.

Rich Learning Contents

Nuvoton Technology has constructed a complete and diversified education and training system, with appropriate learning content available for all different employee levels, job functions and development needs, from newcomers to senior executives. The system includes diversified training categories, solid content and an emphasis on interactive learning and shared discussion, while adding importance to post-learning practical application, so that employees can continue to enhance their knowledge and skills in order to more effectively accomplish the tasks assigned by the company.



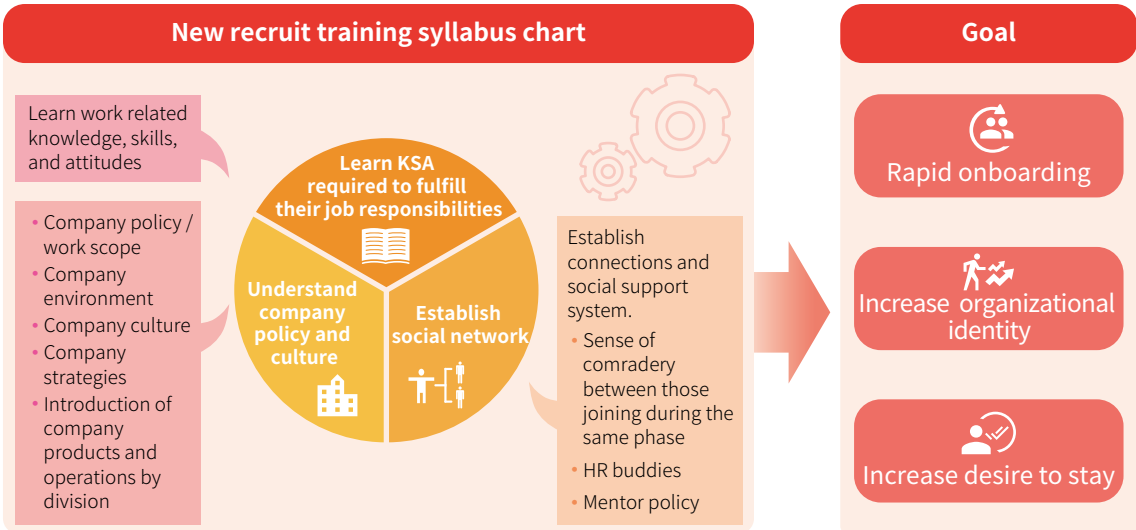
Training Categories

(1) New Employee Training:

to help newcomers quickly integrate into the organization, adapt to the company culture and enhance their willingness to remain, we use new employee training to give them an organizational overview, an understanding of our enterprise's vision and culture, rules and regulations, and various business units and their products, and to learn the basic skills and knowledge required for their job, so that newcomers can become familiar with the Company's business and related operations as soon as possible. At the same time, we also care for new employees and provide them with necessary information and support through the establishment of the HR Buddy system and other assistance mechanisms. This allows new employees to quickly and effectively build an interpersonal connection network and support system.

New Employee Training - Goal

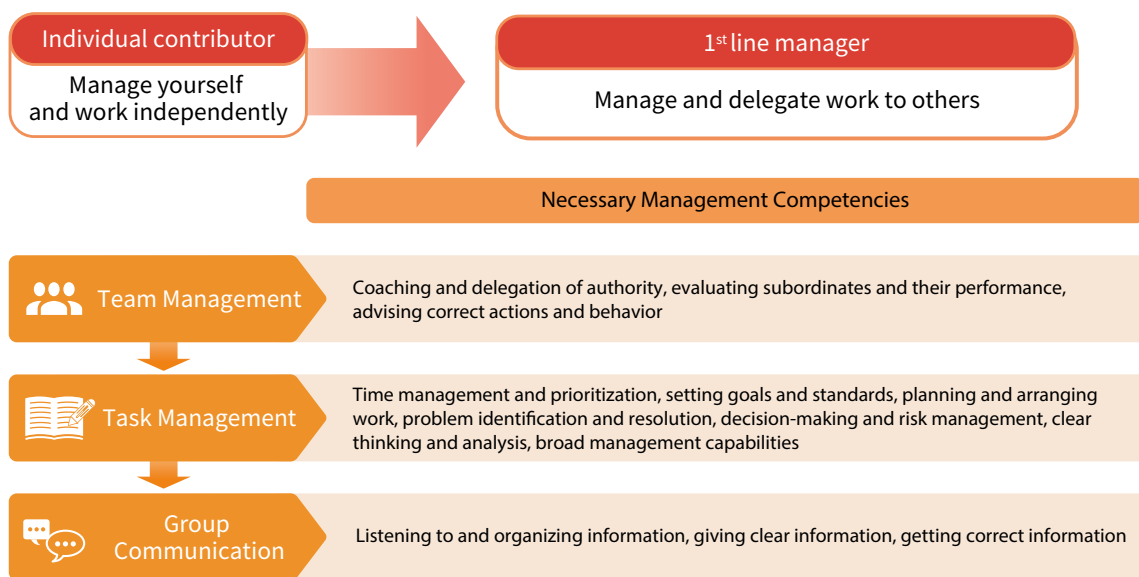
Assist new hires with the onboarding process to help them quickly learn the knowledge and skills needed to do their jobs, inject into them cultural DNA to become a new seed for the continuation of company culture and increase organizational loyalty and desire to remain for the long-term.



(2) Management Training :

Nuvoton Technology defines the management competencies that should be possessed by a manager at every different level. To enable managers to possess the necessary competencies required at each level according to the different functions and roles of their job, we provide corresponding training courses on a function-by-function basis. A tailored "Leadership Development Training Program" is available, including for lower or middle level managers; and high-level managers are required to attend an advanced series of "Topic-Specific Practical Experience Sharing" lectures. There is also a new supervisor training program to provide basic management training to individual workers becoming 1st line managers.

Management Leadership Development Training - Purpose
From an Individual Worker to a 1st Line Manager



(3) Professional and technical training:

In order to promote the learning of professional knowledge or skills to employees in different job positions, and to assist in the development of its business and project plans, each organizational unit will arrange on-the-job training within its department per its own specialized fields. Various courses, special lectures, seminars, experience sharing and other technical and professional training

will also be provided. The fields of training provided include direct personnel training (workstation skills training), engineering, research and development, marketing / business, finance, import / export / procurement, information technology, and legal services training.

(4) Universal Training:

In order to comply with the requirements of laws, regulations and company policies, we arrange

universal basic training. The training, for which all employees are required to attend, includes content about the company's vision and mission, corporate culture and values, corporate social responsibilities, customer satisfaction, quality management, environmental, safety and health requirements (including environmental protection, fire drills etc.) and other courses, and the course content does not vary across employee hierarchy or departmental function. Included within this training, in order to promote the philosophy of "being a good corporate citizen" and with the expectation that employees can implement this philosophy in their daily work, the Company will arrange new employees to take Corporate Social Responsibility related courses such as the "CSR Code of Conduct" and "How to Do Business with Integrity". In 2018, a total of 2,885 employees completed CSR-related courses, accounting for 98% of all employees.

Training Quality and Results

In order to ensure the quality of training, Nuvoton has established "Education and Training Management Procedures", to standardize the differentiation of

training needs, the formulation of training plans, the management of training courses and the participation process. Also, it establishes a training follow-up supervision model to ensure that learned skills and knowledge are actually gained and implemented. This model includes: understanding the previous situation of trainees through interviews or surveys conducted before the training, which serve as basic information for curriculum design and curriculum effectiveness; and then conducting post-course surveys and effectiveness tracking, collecting trainee feedback and practical application information, to understand the challenges and difficulties of real-world implementation, in order to improve learning outcomes.

Employee Education and Training Results for 2018

In 2018, Nuvoton Technology provided a total of 12,035 hours of training to its employees, with a total employee attendance of 9,296 attendees. The average duration of training per employee was 8.55 hours. Employee training statistics in 2018 are summarized below:

2018 Employee Training Statistics by Gender and Hours									
Personnel Type	male			female			total		
	Training Hours	Employee No.	Average Hours Per Staff	Training Hours	Employee No.	Average Hours Per Staff	Training Hours	Employee No.	Average Hours Per Staff
Technical	123.98	24	5.17	801.97	369	2.24	925.95	393	2.36
Management	1332.54	133	10.02	122.91	18	6.83	1455.45	151	9.64
Professional	7713.17	633	12.19	1941.01	231	8.40	9654.18	864	11.17
Subtotal	9169.69	790	11.61	2865.89	618	4.64	12035.58	1408	8.55

Note 1: The number of employees counted as the number of active employees at the end of 2018

Note 2: Average hours per staff = training hours / number of employees

Note 3: The above hourly statistics include internal training (classroom and online courses)

Talent Cultivation - Campus Outreach Program

Exceptional employees are fundamental to the continued success and development of a company. In recognition of the importance of fulfilling its civic duties and social responsibilities, Nuvoton Technology continues to nurture its relationship with schools in order to cultivate key talent. Nuvoton not only regularly takes part in campus recruitment activities, but also provides for student company visits, and organizes a number of campus programs. We hope



that by establishing good academic exchanges with schools, and organizing a diverse number of campus programs, we can provide enterprise resources for students, and cultivate talent in line with the needs of the industry, as well as shortening the adaptation period for students to enter the workplace, in order to strengthen the competitiveness of the IC industry.

To provide students with an understanding of business operations and the workplace environment, we hosted tours at Nuvoton for college students from National Chiao Tung University's College of Electrical and Computer Engineering. During these tours, department managers were tasked with giving talks to introduce students to Nuvoton's corporate vision, company culture, salary and benefits system, primary products and their applications, and more, so that visiting students could gain a better understanding of the technologies used and developed by Nuvoton and their latest applications.

A LOHAS Work Culture

In order to create a "work happily, live seriously" LOHAS workplace culture, members of the LOHAS group work year round to plan and hold rich, thought provoking talks on various topics. Different from previous years, popular sports anchor Ingrid Hsu was invited for this year's keynote speech,

inspiring everyone attending to apply the spirit of perseverance seen in sports to our work. For new parents, Wei Wei-Zhi (ZeBa) also shared his experience as a parent, providing those attending with precious advice on the value of family life, managing parent-child relationships, the importance of using correct methods in helping a parent understand their child. For healthy living, after repeated hits to consumer confidence due to recent food safety scandals, we also invited Dr. Chiang Shou-Shan to share how to protect ourselves through our choice of foods.

In addition, a large variety of parent-child events such kite painting, private movie theater screenings and etc. were held each weekend so that employees could focus on enjoying family time together while leaving the planning to us. By helping provide employees with work life balance, physical and mental health, and a broad range of learning opportunities, Nuvoton employees are able to stay happy and healthy. For 2018, our longstanding annual "Five Event Teambuilding Tournament", the selected sporting events were: badminton, billiards, video games, bowling, and bridge. The intensity of the competing teams during the tournament was mirrored by the fans and cheerleaders for each team cheering their team on, creating a lively atmosphere for everyone involved. This event not only gave employees a chance to show a different side of themselves, but also served as an excellent team building opportunity.

LOHAS Events Montage

2018.4.19 Talk by Ingrid Hsu



2018.11.5 Health Lecture by Dr. Chiang Shou-Sha



2018.5.31 Talk on Parent-child Relationships by Wei Wei-Zhi



2018.11.17 Parent-child Kite Painting Event



2018.6.9 Private Movie Theater Screening



2018.11.17 Parent-child Kite Painting Event



Five Event Teambuilding Tournament Montage

The Five Events of 2018: Badminton, Table Tennis, Video Gaming, Bowling, and Bridge

Video Gaming



Bowling



Bridge



Table Tennis



Employee Welfare Committee

To continue the theme of a LOHAS workplace, the Nuvoton Technology Employee Welfare Committee conducts a wide range of activities to promote physical and mental balance, such as promoting and subsidizing staff associations, organizing parent-child

family days, company trip planning, and various arts activities. The Company has also signed agreements with 2,932 different businesses and organizations to provide employees with special offers to ensure that they can enjoy discounts and other deals on food, clothing, hotel reservations, traveling, childcare, and entertainment in their lives outside of work.

Partnering with vendors to promote mobile application offering businesses offering



Nuvoton 10th Year Anniversary Happy Family Day

Celebrating 10 Years of Excellence and a Bright Future

In 2018, the Employee Welfare Committee organized a 10 year anniversary celebration for the 10th anniversary of the Company. The theme of the celebration was family and "Ten Years of Excellence, and a Bright Future". The purpose of the event was to thank all staff for 10 years of service to the Company, and for being such an important driving force behind the Company's continuous growth.

The event included food stalls, public benefits stalls, Interactive VR technology chairs experiencing zone, brain and puzzle games area, clean room experiencing

events, boy girl duets and singalongs, Taiko drums opening performance, top singers concert and more!

In addition, 7 different clubs each organized different activities during the celebration, as well as handed out different anniversary souvenirs to those stopping by. All employees were invited to bring their family to participate in these events, creating yet more parent-child relationship building opportunities. We look forward to creating another 10 years of great memories together with all of our colleagues and family.





Employee Clubs

The 16 currently existing employee clubs include a guitar club, bicycle club, runners club, basketball club, softball club, badminton club, volleyball club, table tennis club, yoga club, bridge club, board games club, baking club, aerobics club, coffee appreciation club, and mixed sports and health club. Each club holds regular practices or meets, and also hosts related events which are open to all employees frequently. Through our club evaluation system, outstanding clubs are awarded funding to cover operational costs to encourage clubs to actively host events and promote member participation.

board games club



bridge club



coffee appreciation club



baking club



aerobics club



yoga club



badminton club



runners club



volleyball club



walking club



health and leisure club



mixed sports club



Company Vacations

Company vacations are the most anticipated activity by Nuvoton employees. Through a travel subsidy system, employees can form groups to go on vacation together, creating closer bonds and relationships between company members. Accompanying family members are also welcome and allow the families of our employees to gain a better understanding of the Company. A diversity of options are available for these trips, with a wide variety of selections suitable for all ages to attend, including amusement parks, room escape games, paintballing, open sea fishing events, DIY baking events and more, for a total of 50 such events to select from and 1,123 participating Nuvoton employees.





Occupational Health and Safety

2018 Occupational Health and Safety Management Policy

<p>Importance</p>	<ul style="list-style-type: none"> The physical and mental health of our employees is an area of great importance to Nuvoton Technology, and is the first point of consideration during the planning of all operations; at Nuvoton we are fully committed to meeting progressive international safety, hygiene, and health promotion concepts.
<p>Policy/ Commitment</p>	<ul style="list-style-type: none"> Commit to the providing, maintaining, and continuous improvement of a work environment that fully complies with all relevant regulations; prevent in all ways possible the occurrence of incidents that may harm our employees in any way; promote and implement LOHAS concepts in employee care, commit to the creation of a happy corporate workplace environment
<p>Goal</p>	<ul style="list-style-type: none"> Creating a safe working environment to serve as the foundation for sustainable development. With the continuation of our “zero workplace disasters” record as the goal of our occupational safety and health management policy
<p>Promotion Contents and Implementation Methods</p>	<ul style="list-style-type: none"> A safe culture: through observation of our operations, environmental safety management contribution rewards, management change mechanisms, and the promotion of safety management platforms for all areas to facilitate a culture of safety throughout the Company. Reduce employee exposure to hazardous substances: engage in workplace hazardous substance exposure evaluation and reduction of toxic substances transportation and handling operations. Establish connections between health risks and occupational factors: cooperate with industrial occupational health, protection, and treatment experts to evaluate risks (human factor, infertility risks, overloading, and harassment evaluation projects)
<p>Performance and Results</p>	<ul style="list-style-type: none"> Positive Reinforcement Measures for EHS Management Contributions and Incentives: Launched EHS performance evaluations and rewards for each area. "administrative/support units" were added to the list of evaluated areas in 2018 Established emergency response e-platform: lowering response times and improving loss prevention management Area Industrial Safety Committees: According to different safety, health, and environmental issues related to each area, 4 different area Industrial Safety Committees were established to work on the promotion of comprehensive industrial safety practices to improve workplace safety.

Establishing a Safety Conscious Culture

To Nuvoton Technology, ensuring zero occupational accidents and promoting employee health are obligatory responsibilities. We are actively establishing and promoting a culture of environmental protection, safety, and health: "Before engaging in any activity, service, or production, environmental protection, safety, and health concerns must be considered first."

- The chemical analysis laboratory is a non-toxic chemicals handling facility
In 2018 workplace hazardous material exposure assessments were conducted followed by change procedures to facilitate and push forward the nullification of approval documents for the the handling of low amounts of CrO₃/CHCl₃.
- Establish emergency response platform
Integrate abnormal events handling into the

Positive Reinforcement Measures for EHS Management Contributions and Incentives

To date, the EHS (Environmental, Health and Safety) management unit has continued to follow the P-D-C-A method and the spirit of continuous improvement to maintain our environmental, health and safety management system. Nuvoton is committed to advancing a culture of safety first in the workplace, with implementation from top to bottom, including by promoting regular inspections by plant office personnel down to section head level. The objective is to enable supervisors to understand the work operations of their colleagues and safety conditions of the workplace through on-site inspection, and to detect and reduce potential risks during the inspection and observation process, in order to enhance the safety of work operations and the workplace environment. Personnel safety training and knowledge is not only a basic part of health and safety management, but it is also the main basis for enhancing a culture of safety first in the workplace. All employees who participate in regular EHS training, emergency response training

e-processes platform to shorten response times and improve damage prevention management.

Established rapid FAB emergency response e-platform in 2018



and other related kinds of training can enhance their safety awareness and resilience. Therefore, the EHS management unit established a "EHS Management Promotion Performance" scoring system, to confirm the active contribution of all units in providing a safe and comfortable work environment. An evaluation of the "EHS Management Promotion Performance" is conducted quarterly, with awards and recognition given during each plant section's health and safety meeting.

2018 Winners of the EHS Management Promotion Performance Award (Research and Development Division)



In 2018, each sector pushed forth their "EHS Management Promotion Performance" evaluation items

Evaluation Items	Wafer Foundry Unit	Testing Unit	R&D Unit	行政 / 支援單位
Supervisor inspection and observation of operations	V	V	V	V
Emergency response professional skills test	V	V		
Education and training participation rate	V	V	V	V
EHS system audit	V	V		V
EHS issues QA	V		V	
Occurrence of accident or loss	V	V		V

Establishment of a EHS Committee to Implement a Communication Mechanism

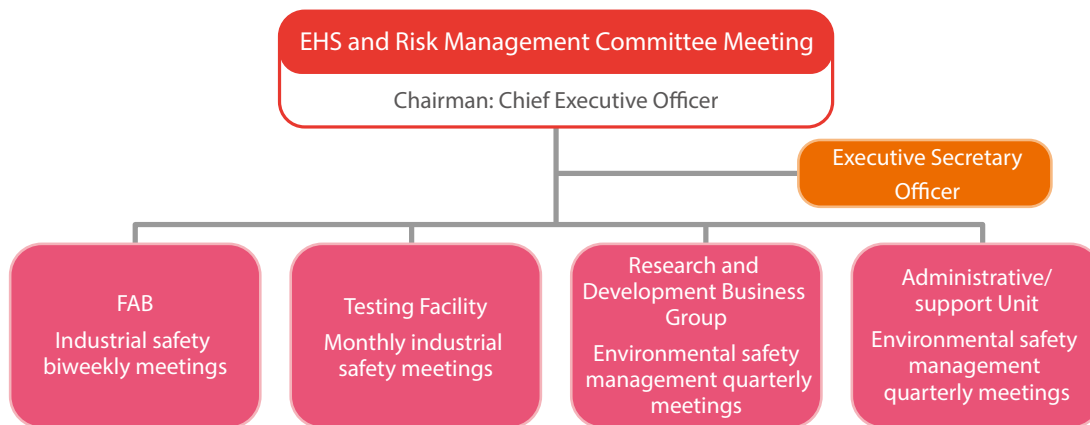
Nuvoton Technology has established a company-wide “EHS and Risk Management Committee”. Chaired by the General Manager of Nuvoton, 7 employees representing each company unit have a seat on the committee, who make up 50% of the total number of 14 committee members. Quarterly meetings are held to discuss daily health and safety management issues and to promote occupational EHS, employee health management, environmental protection and damage prevention, regulatory compliance, continuous improvement programs, and other issues, as well as to implement EHS communication. In addition, according to different safety, health and environmental issues, different periods and safety mechanisms most suitable for each segment are brought forward for discussion

through the labor representatives with their respective committee. Through a comprehensive management system and the active participation of all employees, disaster and loss prevent is able to be achieved.

EHS and Risk Management Committee Meeting



Nuvoton Technology - EHS and Risk Management Committee Organization Chart



Contractor Management and Operational Safety Control

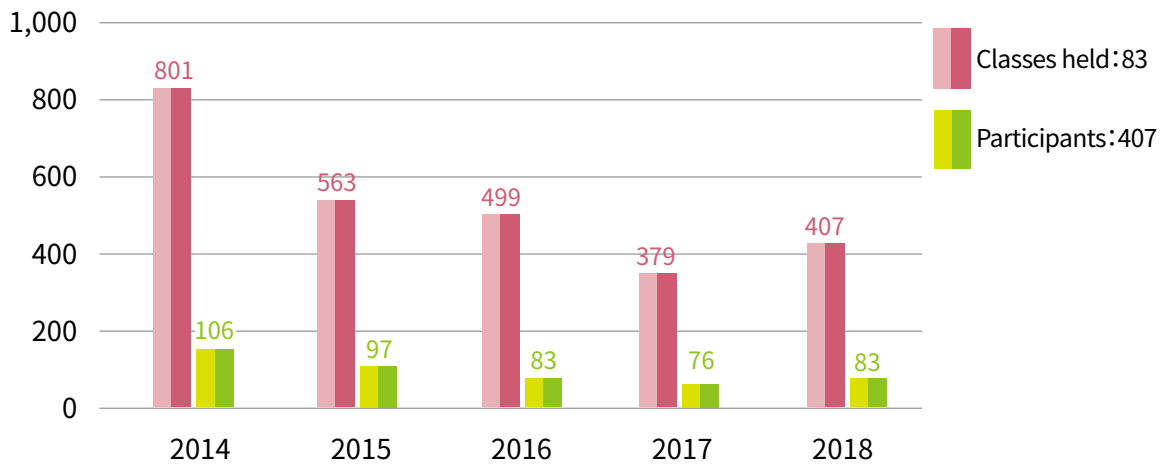
In relation to contractor management and operational safety control, we have established clearly defined environmental, health and safety protocols for vendors during visits to the foundry. A requirement to apply for a construction safety permit allows for the management of construction operations and risks. Contractors are further required to undergo relevant education and training, or be informed of hazard factors, operating environment hazard risks and relevant health and safety regulations, which will help to strengthen operational safety precautions and emergency procedures. These measures are combined

with routine inspections and the adoption of mobile management to fully carry out safety policies. For high-risk operations, such as hot work, lifting and lowering of heavy loads, working with limited space, working above ground level, drainage or handling of special gasses or chemicals, demolition or other such operations, special management and control measures have been implemented, requiring on-site authorization to ensure the safety of workers at each job station as well as to avoid environmental impact. of special gasses or chemicals, demolition or other such operations, special management and control measures have been implemented, requiring on-site authorization to ensure the safety of workers at each job station as well as to avoid environmental impact.

Nuvoton contractors have reported zero number of occupational accidents in the past five years.

Contracto	2014		2015		2016		2017		2018	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Disabling Injury No.	0	0	0	0	0	0	0	0	0	0

Contractor Education and Training Results for 2018



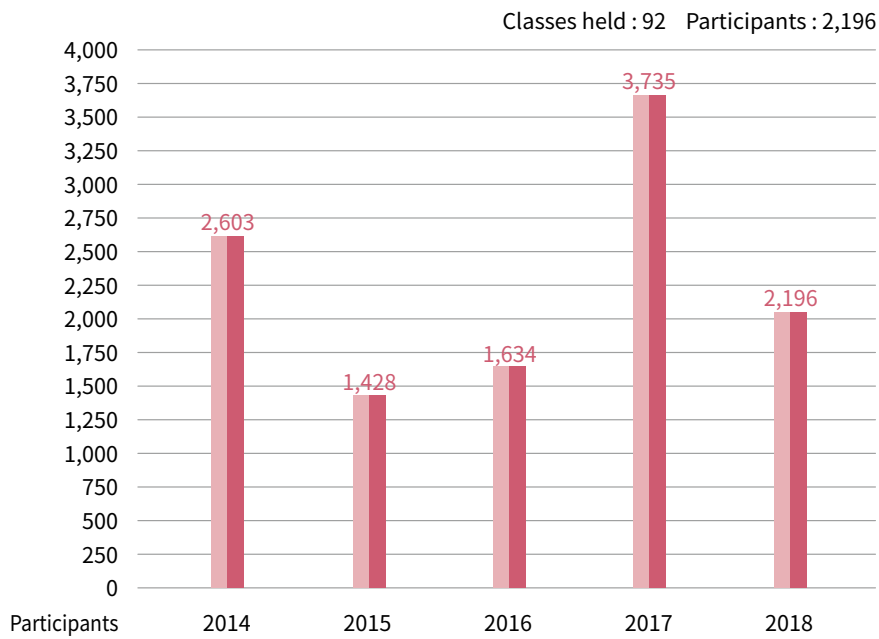
Change Management Systems

Concerning change management, the most crucial element is to fully inform everyone about these changes at an early stage. Therefore, Nuvoton Technology requires that all units not only take the initiative of reporting changes, but also systemize the change application process, sample material identification procedures, material supplier PCN (Process / Product Change Notices), production process or equipment change review meetings (Process Change Review Board), purchasing and other management systems, in order to rapidly manage change. EHS management and related departments will also carry out a preliminary risk and impact assessment. If the addition or change is assessed as having a significant risk or impact, then relevant precautions will be taken. When confirming if the necessary precautions are completed, if there are derivative work control requirements, relevant norms should be set or amended, and relevant personnel should be trained in implementation.

Employee Training and Emergency Response Management

In addition to promoting related health and safety activities, Nuvoton Technology also places emphasis on safety and sanitation training, strengthening risk awareness abilities, harm prevention and emergency response capabilities, and other knowledge and skills, as well as training in emergency response capabilities and safety concepts for our employees. Every 3 years, Nuvoton employees should undergo firefighting training, including the use of fire extinguishers, fire hydrants and emergency smoke escape suits, to strengthen their awareness of disaster prevention and escape. In addition, every year emergency response drills are held to cover a variety of accidents that may occur at the Company, and every 2 years emergency response teams conduct recurrent training, to help familiarize employees with notification and reporting procedures, site control, first aid, disaster rescue equipment operation methods and support. In 2018, during training classes held by the Emergency Response Management Team, 408 employees participated, a total of 28.7% of the Company's total employees.

2018 Safety and Sanitation Education and Training Performance



Safety and Sanitation Education and Training Results

Automated External Defibrillator (AED) training



Emergency Response First Response Team Training



Fire Response Training



Emergency Response Commander Training



Mobile Emergency Smoke Exhaust Use Training



Rescue Team Training



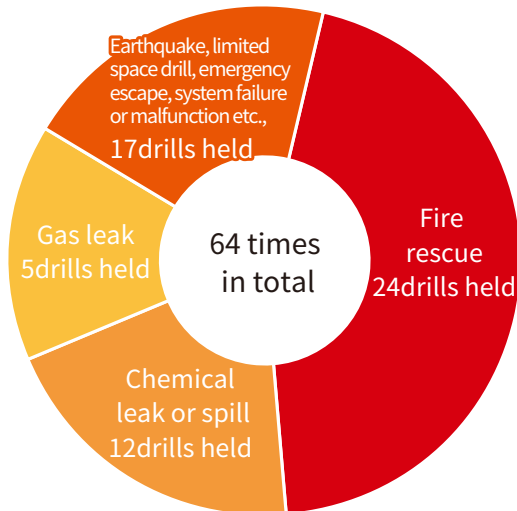
Various Emergency Response Drills During 2018

In response to possible emergencies that could occur such as internal accidents in various areas or natural disasters, Nuvoton has formulated emergency response procedures that provide a basis for internal departments to formulate contingency plans for individual situations, emergency response team formation, and holding drills and training. These

procedures will minimize the impact of personal injuries, property damage and disruptions caused by various emergencies that could occur.

In 2018, a total of 58 emergency response drills (including fire drills, chemical leak drills, gas leak drills and emergency evacuation drills) were held. Holding these drills will enable rapid and correct emergency responses in the event of a real emergency.

2018 Emergency Response Drill Type and Drills Held Summary Figure



Decontamination rescue team



Medical response team and injuring treatment



Response Command Center



Escape and evacuation



氣體洩漏搶救



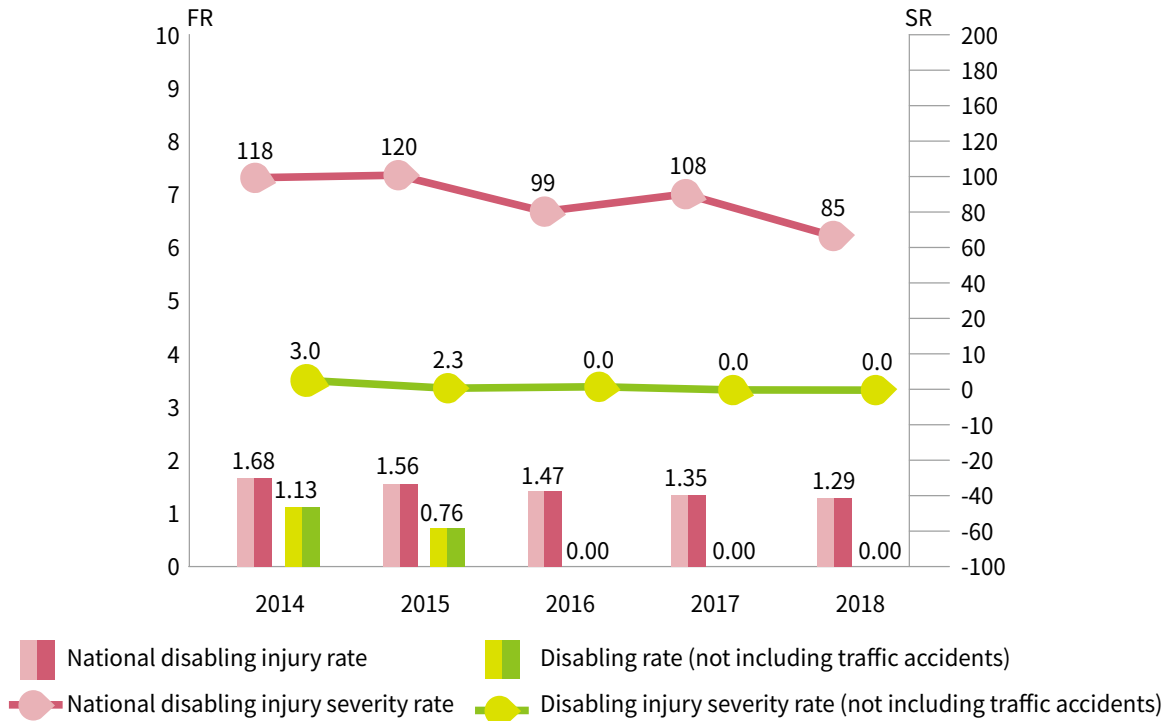
Occupational Accident Indicators

Nuvoton Technology has established comprehensive notification, handling, investigation, improvement tracking measures, and promotional systems to ensure the safety of our fellow colleagues, visitors, and contractors, and to prevent the occurrence of repeat incidents. Following the indicators published by the Ministry of Labor, Nuvoton Technology's occupational accidents analysis uses the Disabling Frequency Rate (FR) and Disabling Severity Rate (SR) for its statistical basis (statistics do not include incidents resulting from traffic accidents from and to work). In 2018, both the FR and SR were zero. Regarding the statistics of accidents occurring to employees during their commute to and from work in 2018, the average FR was 3.58 (4.45 for male employees and 2.45 for female employees), whereas the average SR was 48.0 (49.0 for male employees and 46.6 for female employees). In response, Nuvoton has held traffic safety awareness lectures, inviting experienced traffic officers as speakers to help increase traffic safety awareness during employee commutes as well as promote safe driving practices and emergency response and handling methods during traffic accidents.

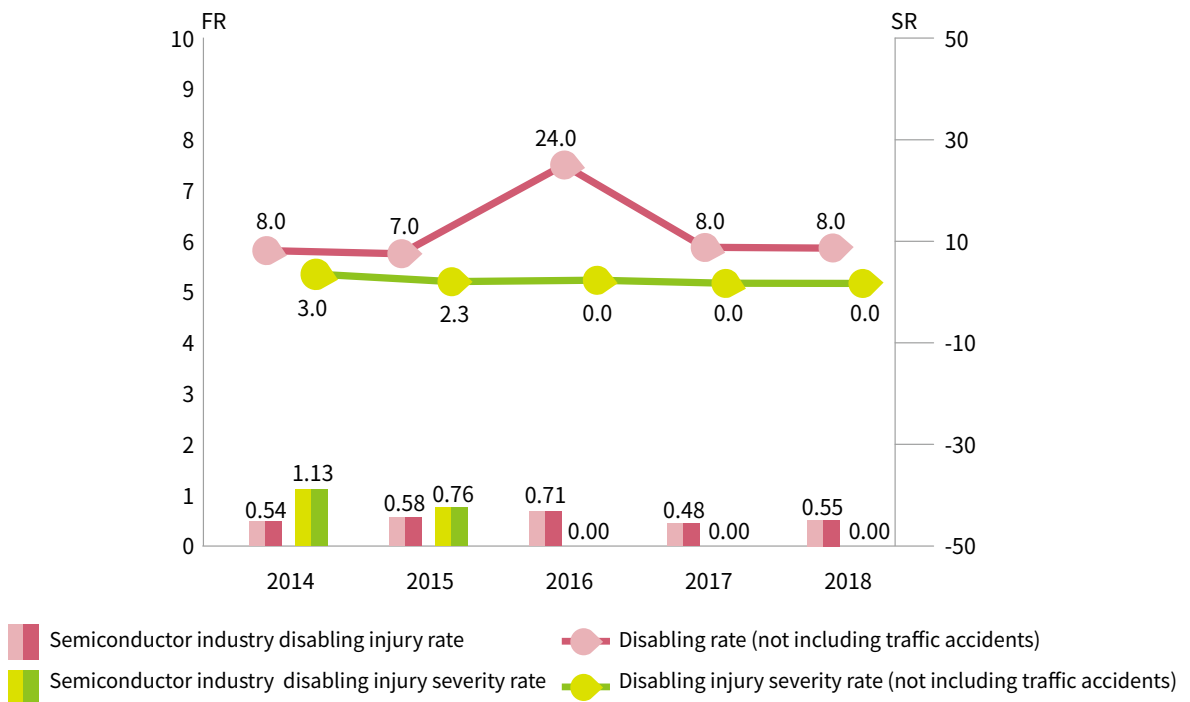
Traffic safety promotion lecture



Million work hours disabling injury and injury severity rates



Million work hours disabling injury and injury severity rates



Employee Accidents (Non-traffic related)	2014		2015		2016		2017		2018	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Number of Disabling Injuries	3	0	1	1	0	0	0	0	0	0
Total Number of Lost Days Due to Injury	8	0	3	3	0	0	0	0	0	0
(FR)Disabling Injury Frequency Rate (FR)	2.13	0	0.71	0.81	0	0	0	0	0	0
(SR)Disabling Injury Severity Rate (SR)	5.7	0	2.1	2.4	0	0	0	0	0	0
(ODR)Occupational Disease Rate (ODR)	0	0	0	0	0	0	0	0	0	0

Note 1: Disabling Injury Frequency Rate (FR) = (number of disabling injuries × 10⁶) ÷ total working hours (rounded off to two decimal places)

Note 2: Disabling Injury Severity Rate (SR) = (Number of days lost to injury × 10⁶) ÷ total working hours (rounded off to one decimal place)

Note 3: Occupational Disease Rate (ODR) = (Number of occupational disease incidences × 10⁶) ÷ total working hours (rounded off to whole number)

Note 4: Days lost due to disabling injury: Refers to the total number of days lost after occurrence of injury for a single case; days disabled refers to the number of days that the injured person is unable to return to work, the total number of days last does not include the day of the injury or the day of return to work. However, all days including weekends, holidays, or work stoppages between the day of injury and day of return to work due to the accident are counted.

Employee Accidents (Non-traffic related)	2014		2015		2016		2017		2018	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
No.of disabling injuries	4	5	4	1	2	1	5	0	7	3
Total Number of Lost Days Due to Injury	49	20	20	2	17	1	26	0	77	57
Disabling Injury Frequency Rate (FR)	2.84	4.01	2.84	0.81	1.38	0.84	3.27	0	4.45	2.45
Disabling Injury Severity Rate (SR)	34.7	16.1	14.2	1.6	11.7	0.8	17.0	0	49.0	46.6

See below table for 2018 Company absenteeism rate

Year	2018			
	Hours Absent		Absenteeism Rate	
	Male	Female	Male	Female
Work-Related Sick or Injury Leave	344	130	0.02%	0.01%
Sick Leave	5,240	9,767	0.34%	0.83%
Personal Leave	5,410	3,565	0.35%	0.30%
Sub-total	10,994	13,462	0.71%	1.15%

Note 1: The absenteeism rate is calculated as: (hours absent for each type of leave / total number of normal working hours) * 100%

Note 2: "Normal total work hours" was estimated using the male/female employee ratio for each shift type in 2018

Health Management Program

Only with healthy employees can the development of innovation and vitality can be sustainable, therefore healthy employees are an important asset of the Company. Nuvoton Technology's health management and promotion plan is to keep working towards the LOHAS goal of "Work Happily, Live Healthily". We are committed to taking good care of our employees' health and well-being, and even extend our support to assist with the health issues of employees' dependents and families. We also are committed to providing a high quality workplace environment and culture. This is so that our employees can have peace of mind, and balance and develop in unison the key areas of their lives such as health, family, work, sports and leisure.



Health Management Plan

Nuvoton Technology's health management unit is positioned as a service management unit, providing "a warm and friendly service, and goal-oriented management". The management structure incorporates OHS and environmental protection elements, and focuses on creating a safe and hygienic work environment to protect and promote the safety and health of employees, working hard to reduce the health related factors that affect productivity, such as work-related injuries and infectious diseases, and implementing the Company's policy of "a healthy workplace, and a friendly company".

- 24 Hour Health Services

Healthcare personnel at the Company health care center provide 24 hour health services and emergency rescue for Company employees. The fully equipped and well lit health care center provide employees an immediate sense of relaxation and security upon entering. Private spaces within the health care center are available for any employee feeling ill or emotional distress to either rest or receive consultation.

- Emergency and First Aid Response

Our established system of various incident notification and response procedures is not

only reinforced through education and training courses, but also through the use of e-learning, thereby enhancing employee safety and sanitation concepts and awareness. Several types of advanced emergency equipment have been prepared in the factory area, such three AED (Automated External Defibrillator) units, and two sets of supplementary oxygen units, in order to ensure the health and safety of employees. In addition, CPR and AED training is actively promoted throughout the company, increasing employee emergency response knowledge and capabilities.

- Convenient Health Management System

Employees can use the Company's internal web platform "My Health Manager" to look up their health check report records and trends. In consideration of personal information and digital security problems, employees must log in using the password for secure individual accounts that they register with the company. The provision of a convenient health and safety trend management system for our employees further allows us to provide various health related announcements and news regarding health promotion activities, allowing employees to take charge of their own health while also receiving the latest news. At the end of 2018, the website had reached over 22,474 views.

- Health Check Program

Every Nuvoton employee is provided an annual health check, with different groups being tested for different items, introducing the Three Levels and Five Stages of Disease Prevention model to achieve early diagnosis and early treatment. During the health check-up period, the Company encourages employees to participate and our employees have also developed an awareness of the importance of these health checkups. Those that were on parental leave, on business trips, or sick leave during the time our annual health checks are provided are able to get checked at later provided times. Historically we have seen an over 99% participation rate. During our years of cooperation with medical center teams, we have continued to revise the period where health checks are provided, improving the quality of the health inspect services provided, achieving an employee satisfaction rate of greater than 95%. Additional special health examination types provided are ionizing radiation exposure, arsenic exposure, and particle exposure checks. Over 20 employees received the above checks, and due to proper work safety monitoring and regulations and work operations procedures, no employees

checked were classified with abnormality grades of higher than II.

- **Drafting and Implementation of Health Management SOP for Health Management**

Following the completion of the health examination is when health management truly begins; determined from analysis and grading of the health examination results data, employees with slight abnormalities are given physician counseling and health lectures, while those with serious abnormalities are arranged to have medical examinations and treatment. In 2018, we tracked the status of 15 fellow employees that were found to have serious health problems, over the year. Although the conditions of these employees were not work related, support and control of their conditions is still a top priority for the Company. Previous health problems are also actively tracked and the necessary support is provided. Those with non-severe conditions are provided consultation sessions and health advice from outpatient physicians to help keep protect employee health.

- **Health Clinic**

Nuvoton arranges for physicians specializing in occupational disorders or family medicine to hold on site clinics every month as well as proactively arrange for employees from all groups to participate. These clinics provide health checks and reports, medical consultation, traffic accident injury recovery and back to work consultation, personalized counseling in accordance to employee job position and work content, stress and sleep conditions evaluation, and assistance the health care center in providing better health care services and management by joining health care center personnel for biannual work site hazard identification recognition inspections to help provide suggestions for preventing occupational related diseases. Recommendations are made for employees with serious conditions to receive follow up checks and care at hospitals. Nurses continue tracking and providing support. To maintain clinic consultation quality, satisfaction surveys are given to each patient after their consultation. Feedback received is provided to consulting physicians for the continued improvement and strengthening of medical consultation services provided. We look forward to providing all Company employees with the excellent health care they deserve and achieving the goal of health for all.

- **Promotion of Workplace Protection Plan**

Nuvoton Technology has created different

protection plans for different groups of employees. Nuvoton Technology has declared its determination to oppose workplace violence by establishing policies and channels for reporting any such incidents. We strive to treat all Nuvoton employees as family, living in harmony, solving problems rationally, to provide our employees with a safe working environment and peace of mind.

- **Employee Assistance Program (EAPC)**

Cooperation with external professional mental health institutions allows us to provide all company employees with at least 3 free counseling sessions per year. Employees that need more than 3 sessions can apply internally for approval for further sessions. Through internal public announcements and new employee training courses, employees are encouraged to look at receiving counseling for psychological and emotional problems positively. The Company makes it easy for those that need help to easily reach out for help whenever they need it to avoid later regrets. All contents discussed during counseling sessions are confidential and employees are encouraged to feel safe to reach out for help. For emergency situations, EAPC can also provide professional emergency meetings to advise the health care center on how to handle specific cases to better assist employees in reaching a happy ending. In 2018, a total of 4 counseling hours were used, and use of mental health care services provided at currently still being promoted within the company.

- **Maternity Protection**

We provide pregnancy and post-pregnancy handbooks, physical and mental assessments, job suitability and risk level assessments and management planning, and one on one health consulting with a physician for all female employees starting from the beginning of their pregnancy for up to a year after birth. Nuvoton actively encourages its employees to have children, and provides fully-equipped nursing rooms, special parking spaces for pregnant women, baby supplies and childcare support etc. to provide our employees that are just beginning to start families with additional support.

- **Human Factors Injury Prevention Program**

To help employees avoid musculoskeletal injuries caused by repetitive work or incorrect posture, a human factors injury prevention program was implemented. Every year during the Company's annual employee health check period, online surveys are conducted to help better understand musculoskeletal discomforts

currently being experienced by employees. For serious cases, outpatient consultations or on site work assessments are carried out by occupational physicians and proper sitting advising is given on a one on one basis. In addition, soreness and pain prevention must take root causes into consideration. Every day in the mornings and afternoons, stretching music is broadcast three times a day in our offices to remind employees to take breaks when necessary and stretch. With the prevalence of sore body parts, stretching

movements should involve the entire body from neck to shoulder to waist and legs to achieve the goal of soreness and pain prevention. The Company also arranges for visually impaired masseuses, stretching instructors, and physical therapists to the Company for consultation events on a constant basis. Employees have responded well to these soreness and pain relief methods, and ergonomic office desks and chairs are further provided to reduce the risk of musculoskeletal problems caused by sitting.

2018 Human Factors Injury Prevention Program



Stretching classes

13 Classes
168 Participants



Physical therapy consultation

865 consultation sessions given

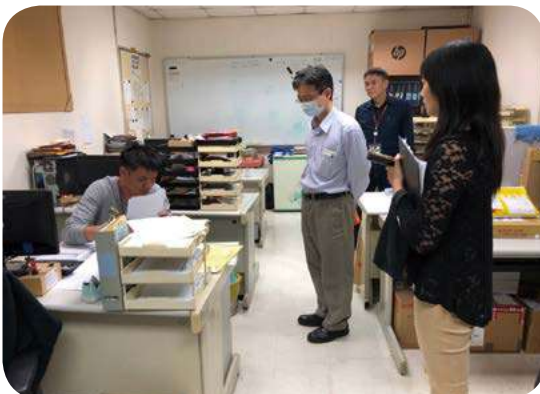


Massage by the visually impaired

3768 massages given



Human Factors Injury On Site Evaluation



Maternal Protection Consultation



- Work Overload Management

In order to prevent work overloading leading to related diseases, the online annual health check questionnaire allows employees to fill in their work and personal pressure factors. After each annual health check and test results analysis, employees that are at high risk of cardiovascular disease are assessed for duration and work environment related risk when working night shifts, day shifts, and rotating shifts. Consultations with a physician are also arranged for these employees for individual consultation and health education. Extra attention is also paid to these workers to ensure that they do not work overtime. In 2018, the resident physician consulted with 51 employees, encouraging employees to actively manage their own health by engaging in healthy activities such as walking, weight loss classes, community sports activities and so forth to reduce risk factors and improve their physical and mental health. Continued follow up and care for these employees has also been arranged.

High risk

- Assessment interview with a nurse and consultation with a physician to receive risk management and health guidance and save records on file.
- Advise medical assistance to change lifestyle and follow up at least once every three months

Medium risk

- Receive reminder of at risk areas and management education
- Advise a change of lifestyle and consider medical assistance, adjust workload and follow up at least once every 6 months

Low risk

- Self-management, no medical assistance required, can take on regular workloads

Health Promotion Plan

Healthy employees are one of the Company's greatest assets. Healthy employees have better quality of life and work efficiency. Therefore, we continue to promote health related activities each year, such as weight loss and walking. This year, we body composition tests for employees to see what their muscle, body fat, and water compositions are. Combined with exercise oriented clubs, we hope to drive a trend of exercise, fitness and healthy eating within the company. Employee transformation begins with education. Teaching employees how to self monitor and manage and creating an exercise friendly and healthy environment to promote a healthy work culture, we hope to implant "healthy living" into Nuvoton's DNA. Cancer prevention is

also one of the major health plans promoted by our health care center. Cancer has been the leading cause of death for ten years in a row, and using data published by the National Health Promotion Administration, the health care center provides high-risk screening for employees so that company support can be provided at the earliest time possible. We encourage all employees to get screened, early detection is key to cancer treatment. In 2018, nasopharyngeal and prostate cancer prevention was added to the list of cancers screened for, bringing the total to 8. During 2018, employees actively participated in screenings, and we are glad to report no major abnormalities amongst participants. All minor abnormalities found were also quickly tested for and found to be benign.

Bone density testing



Body composition testing and explanation



Walking event



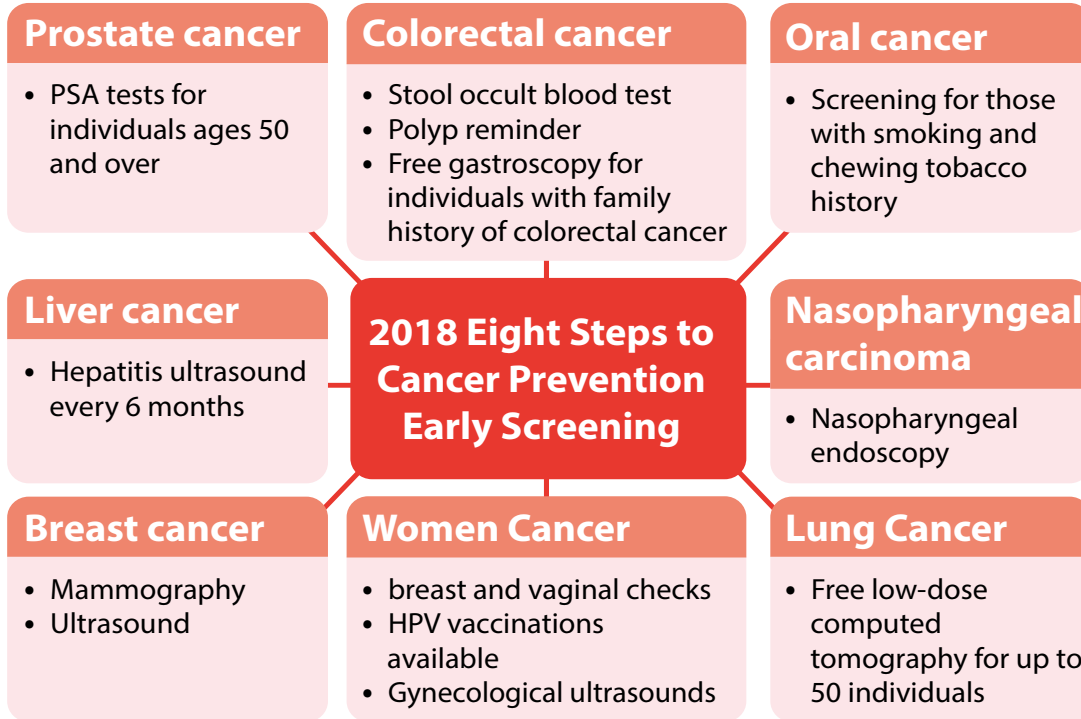
Walking event



Body composition testing and explanation



Health Promotion Cancer Prevention Program







07 Philanthropy

■ Public Welfare Events



Philanthropy

Public Welfare Events

In 2018, Nuvoton continued to deepen the two key points, “environmental sustainability” and “caring for the disadvantaged”. We have held public welfare events, such as “beach cleaning events”, “second hand items charity sales”, and “Bringing Warmth to Winter - Year-end Donations and Supplies” to encourage employees to pass on our love and support to make the world a better place. The donations were mainly used to help the disadvantaged groups in the society, such as the Genesis Social Welfare Foundation, Shih Guang Educational and Nursing Institution, Taiwan Fund for Children and Families, Children’s Hearing Foundation, Municipal Yuandongguomin Junior High School, impoverished hospital patients, etc., as well as Nuvoton employees in need.

Beach Cleaning

Nuvoton called on employees and their families to help protect the earth, and participate in the spring and autumn season beaching cleaning events held by the Environmental Protection Bureau of Hsinchu City. In addition, Nuvoton employees have also helped cleaned Kanhai Park and Yugang Park to best help our earth. If tiny plastic particles on the beach flow into the sea, they will seriously affect the ecology and human health. Therefore, in addition to large-scale waste, we also use mesh nets to slowly screen the sand and pick out the plastic fragments. Although it is very laborious work, seeing the beach clean makes the hard work worth it.

Environmental Education and Environmental Protection Activities

Since 2016, Nuvoton Technology has joined as a partner of the Hsinchu Science Park Environmental Education Program to actively assist and participate in the promotion of environmental education and environmental protection activities. In 2018, we co-organized a environmental promotion and education event with the Water Resources Agency Baoshan Second Reservoir Management Center. For the event, employees were invited to Baoshan Reservoir to understand more about the Reservoir and learn what they can do to help protect water resources. In addition, we partnered with the Hsinchu Bureau of Environmental Protection to sponsor a membership points and rewards system for Nuvoton employees

when purchasing green products to encourage employees to participate in environmental protection activities. Membership points can be accumulated by downloading a personal QR code.

Second Hand Items Charity Sales

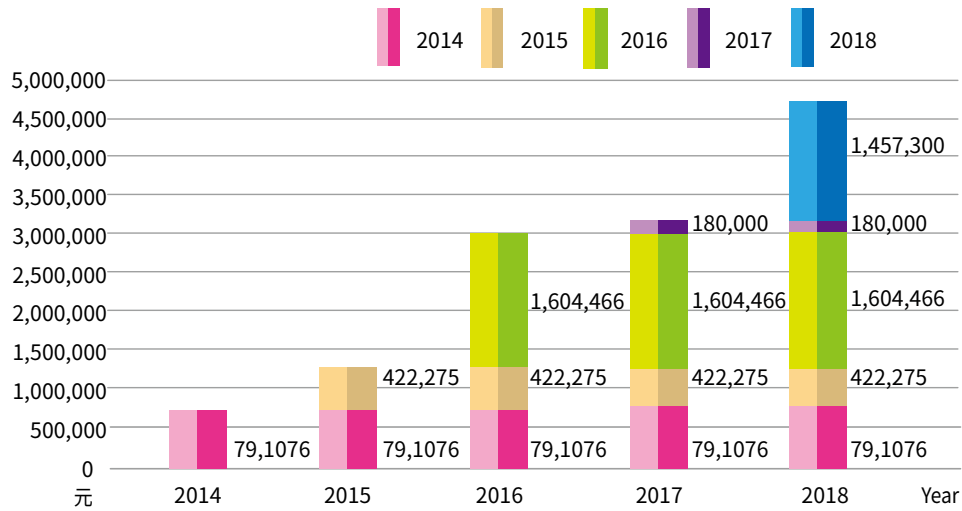
At the end of each year, we use the opportunity of the year-end cleaning to encourage employees to bring items that are not needed but wanted in their homes to the company to be donated. In addition to providing usage of the goods for the benefit of the environment, it also helps others in the process. All the proceeds from charity sales will be donated to disadvantaged groups.

Bringing Warmth to Winter - Year-end Donations and Supplies

In addition to charity sales, we have also invited employees to donate money to help disadvantaged groups. At the same time, we encouraged them to donate warm clothing or cleaning products, as well as items urgently needed by social welfare groups. The items were donated to, Shih Guang Educational and Nursing Institution to provide power or warmth in the cold winter.

In 2018, Nuvoton donated a total of NTD 1,457,300 to help poor patients at Hsinchu’s National Taiwan University Hospital and Mackay Memorial Hospital. The human body may be able to survive even in poverty, but poverty commonly results in diseases which lower quality of life, which is why we hope to provide a helping hand to those living in poverty. We want to show our care and support to the people who are living in poverty and experiencing hardship, so they can see that there is warmth in the world so they don't give up hope. The amount of donations in the past 5 years is shown below.

Donations to help disadvantaged groups from 2014 to 2018



Donating to Taiwan National University Hospital Hsinchu Branch



2018.11.17 Beach cleaning event



Donating to Mackay Memorial Hospital Hsinchu Branch



2018.12.20 Second hand charity sale event



2018.11.17 Beach cleaning event



2018.10.18 Mid-autumn Festival pomelo donations to the elderly



Hsinchu Science Park Administration Environmental Education Partnership



Ministry of Economic Affairs Water Resources Agency Baoshan Second Reservoir Environmental Education Event

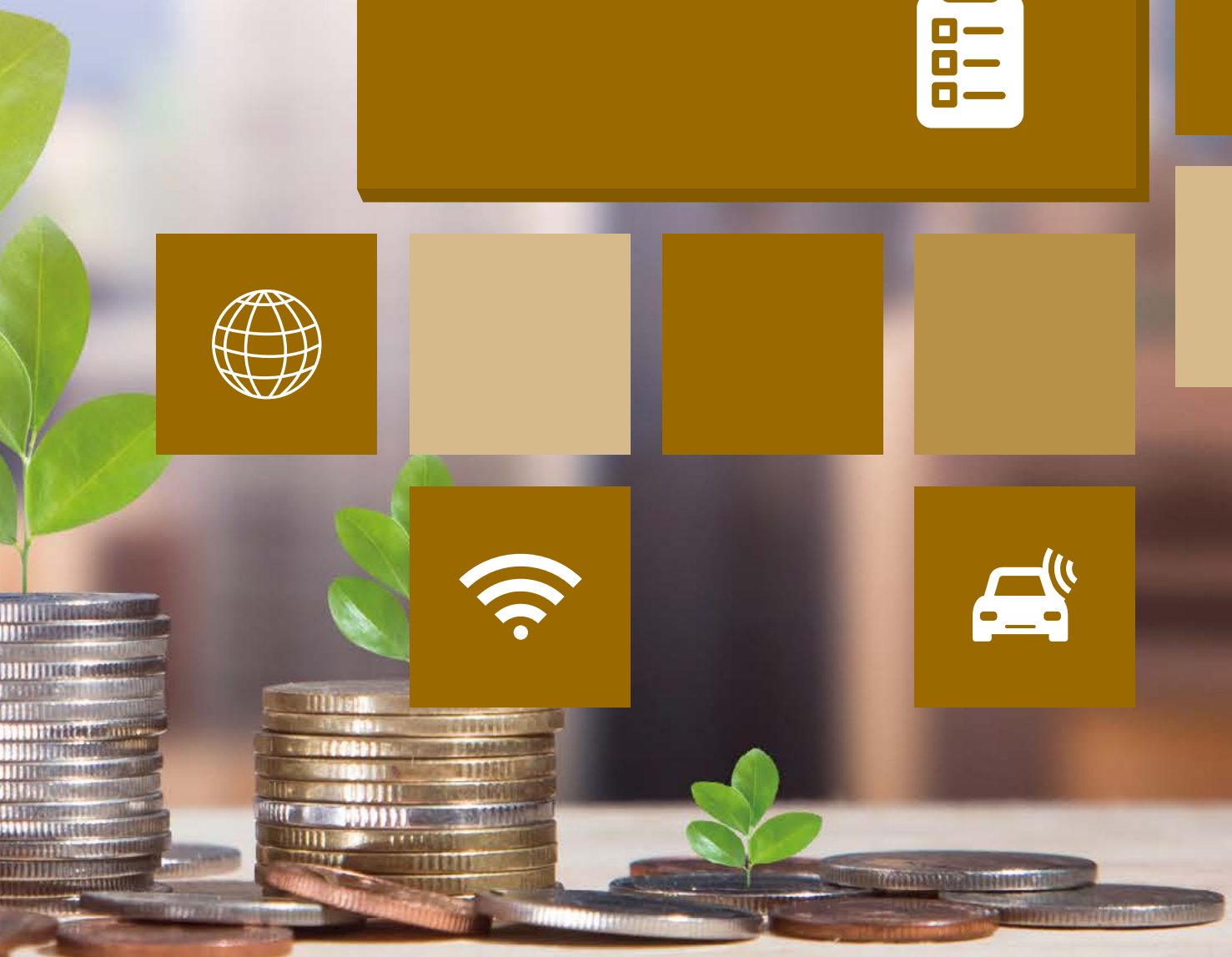






08 Appendix

- GRI Standards Index Table
- Third Party Verification Statement



Appendix

GRI Standards (2016 version) Index Table

General Standard Disclosures

Scope	Index	Section	Details	Page No.	External Assurance
Organization Profile	102-1	3.1 Company Introduction		16	
	102-2	3.3 Innovative Technology and Products		17	
	102-3	3.1 Company Introduction		16	
	102-4	3.1 Company Introduction		16	
	102-5	3.1 Company Introduction		16	
	102-6	3.1 Company Introduction 3.3 Innovative Technology and Products		16 17	
	102-7	3.1 Company Introduction 3.5 Financial Performance		16 19	
	102-8	7.1 Human Resources Structure		60	
	102-9	5.4 Sustainable Supply Chain Management		36	
	102-10		No significant changes		
	102-11	4.6 Risk Management		30	
	102-12	4.5 Legal Compliance		28	
	102-13	3.6 Association (Guild) Membership		20	
	102-14	1. Words from the Chairman		04	
102-16	4.4 Code of Conduct and Regulatory Compliance		26		
102-18	4.1 Corporate Governance Framework		24		

Scope	Index	Section	Details	Page No.	External Assurance
Identified Material Aspects and Borders	102-40	2. Overview		10	
	102-41		The company has no group agreement		
	102-42	2.2 Communication and Participation of the Stakeholders		10	
	102-43	2.2 Communication and Participation of the Stakeholders		10	
	102-44	2.2 Communication and Participation of the Stakeholders		10	
	102-45	2. Overview		10	
Stakeholder Engagement	102-46	2.2 Communication and Participation of the Stakeholders		10	
	102-47	2.2 Communication and Participation of the Stakeholders		10	
	102-48		No restructuring of report		
	102-49		Report has no significant changes		
Report Profile	102-50	2.1 Description		10	
	102-51	2.1 Description		10	
	102-52	2.1 Description		10	
	102-53	2.1 Description		10	
	102-54	2.1 Description		10	
GRI Content Index	102-55	2.1 Description		10	
Assurance/ Confidence	102-56	2.1 Description		10	

Special Metrics Disclosure

Economics Category					
Scope	Index	Section	Page No.	Omitted	External Assurance
Economic Performance	Management Policies	3.5 Financial Performance	19		
	201-1	3.5 Financial Performance	19		
	201-3	7.3 Salary and Benefits	62		
Market Position	Management Policies	7. Best Workplace	60		
	202-1	7.3 Salary and Benefits	62		
Anti-corruption	Management Policies	4.4 Code of Conduct and Regulatory Compliance	26		Self-disclosure
	205-2	4.4 Code of Conduct and Regulatory Compliance	26		Self-disclosure
	205-3	4.4 Code of Conduct and Regulatory Compliance	26		Self-disclosure

Environmental Category					
Scope	Index	Section	Page No.	Omitted	External Assurance
Energy	Management Policies	6.2 Cherishing Resources	42		
	302-1	6.2.1 Energy Conservation	43		
	302-3	6.2.1.2 Energy Density	43		
	302-4	6.2.1 Energy Conservation	43		
Water	Management Policies	6.2 Cherishing Resources	42		
	303-1	6.2.2 Water Conservation	45		
	303-3	6.2.2.2 Water Recovery Rate and Total Amount	45		

Scope	Index	Section	Page No.	Omitted	External Assurance
Emissions	Management Policies	6.4 Greenhouse Gas Emissions Management	53		
	305-1	6.4 Greenhouse Gas Emissions Management	53		
	305-2	6.4 Greenhouse Gas Emissions Management	53		
	305-5	6.4 Greenhouse Gas Emissions Management	53		
Sewage and Waste	Management Policies	6.3 Pollution Prevention	47		
	306-1	6.3.3 Water Pollution Prevention	49		
	306-2	6.3.4 Waste Management	50		
Environmental Protection and Legal Compliance	Management Policies	4.4 Code of Conduct and Regulatory Compliance	26		
	307-1			No violations of environmental laws and/or regulations and fines occurred during the reporting period	
Suppliers Environment Assessment	Management Policies	5.5 Sustainable Supply Chain Management	36		
	308-1	5.5 Sustainable Supply Chain Management	36		

Social Category					
Scope	Index	Section	Page No.	Omitted	External Assurance
Employer/employee Relations	Management Policies	7. Best Workplace	60		
	401-1	7.2 Talent Acquisition	61		
	401-2	7.3 Salary and Benefits	62		
		7.6 Employee Welfare Committee	70		
401-3	7.3 Salary and Benefits	62			
Employer/employee Relations	Management Policies	7. Best Workplace	60		
	402-1	The notice period for Nuvoton's major operational changes is handled in accordance with local laws and regulations			

Scope	Index	Section	Page No.	Omitted	External Assurance
Occupational Health & Safety	Management Policies	7.7 Occupational Health and Safety	75		
	403-1	7.7 Occupational Health and Safety	75		
	403-2	7.7.7 Occupational Accident Indicators	81		
Training & Education	Management Policies	7. Best Workplace	60		
	404-1	7.4 Learning and Development	64		
Diversity & Equal Opportunity	Management Policies	7. Best Workplace	60		Self-disclosure
	405-1	7.2 Talent Acquisition	61		Self-disclosure
No Discrimination	Management Policies	7. Best Workplace	60		
	406-1	7.2 Talent Acquisition	61		
Child Workers	Management Policies	7.1 Human Resource Structure	60		Self-disclosure
	408-1	7.2 Talent Acquisition	61		Self-disclosure
Forced Labor	Management Policies	7.2 Talent Acquisition	61		
	409-1	7.2 Talent Acquisition	61	Suppliers were not discussed in respect to this subject in this report. Related issues will be added to future supplier self-evaluation items.	
Customer Health and Safety	Management Policies	6.5 Green Products	55		
	416-1	6.5 Green Products	55		
Marketing and Labeling	Management Policies	6.5 Green Products	55		Self-disclosure
	417-2	6.5 Green Products	55		Self-disclosure
Client Privacy	Management Policies	5. Client Services and Supplier Management	34		
	418-1	5.3 Client Privacy Protection	36		
Social and Economic Legal Compliance	Management Policies	4.4 Code of Conduct and Regulatory Compliance	26		
	419-1	4.4 Code of Conduct and Regulatory Compliance	26		

Third Party Verification Statement



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE NUVOTON TECHNOLOGY CORPORATION'S CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2018

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Nuvoton Technology Corporation (hereinafter referred to as Nuvoton) to conduct an independent assurance of the Corporate Social Responsibility Report for 2018 (hereinafter referred to as CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in this report.

The information in the Nuvoton's CSR Report of 2018 and its presentation are the responsibility of the management of Nuvoton. SGS has not been involved in the preparation of any of the material included in Nuvoton's CSR Report of 2018.

Our responsibility is to express an opinion on the report content within the scope of verification with the intention to inform all Nuvoton's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for:

- AA1000 Assurance Standard (2008) Type 1 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008) at a moderate level of scrutiny; and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with.

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from Nuvoton, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within Nuvoton's CSR Report of 2018 verified is accurate, reliable and provides a fair and balanced representation of Nuvoton sustainability activities in 01/01/2018 to 12/31/2018.

The assurance team is of the opinion that the Report can be used by the Reporting Organisation's Stakeholders. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report meet the requirements of GRI Standards in accordance with Core Option and AA1000 Assurance Standard (2008) Type 1, Moderate level assurance.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

Nuvoton has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns.

Materiality

Nuvoton has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

Responsiveness

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, Nuvoton's CSR Report of 2018, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, the organization shall describe the risk assessment approach for identifying suppliers which might have significant risk for incidents of forced or compulsory labor and the assessment results (GRI 409-1). Also, when reporting on goals and targets for each material topic, the expected results are suggested to be set, if applicable, with quantitative objectives.

Signed:

For and on behalf of SGS Taiwan Ltd.



David Huang
Senior Director
Taipei, Taiwan
18 July, 2019
WWW.SGS.COM



AA1000
Licensed Assurance Provider
000-8



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2018 Corporate Social Responsibility Report

